Table 4.3-1 (Continued)

CULTURAL RESOURCES SITE SUMMARY

Ogden Temporary Number	State Trinomial	Site Type	Features	Area (sq. m)	Original Survey	Original Recorder and Year	Status	Subsurface	Specific Plan/ Tentative Map	Constraint Level	Anticipated Impacts
SFV- S 14	SDI-13,016	TC		312	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Bernardo Lakes	3	No
SFV- S 15	SDI-13,017	BM/TC	Rock Ring	1789	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 16	SDI-13,018	BM		35	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 17	SDI-13,019	BM		61	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	McCrink	3	Yes
SFV- S 18	SDI-13,020	BM		41	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 20	SDI-13,021	LS		1119	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 22	SDI-13,022	TC		2540	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	McCrink	3	Yes
SFV- S 23	SDI-13,023	LS	Rock Walls	13538	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 24	SDI-13,024	Qu		2177	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 25	SDI-13,025	Qu/LS	Cairns	25102	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 26	SDI-13,026	BM		63	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 27H	SDI-13,027H	HS	Rock Dam	725	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Present	Specific Plan	2	Yes
SFV- S 29	SDI-13,028	LS		9435	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	McCrink	3	No
SFV- S 30	SDI-13,029	Qu/LS		645	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 32	SDI-13,030	LS		4355	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	McCrink	3	Yes
SFV- S 34	SDI-13,032	Qu		28	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 39	SDI-13,033	TC/BM		2198	Santa Fe Valley Survey	Ogden 1992	Tested	Present	Balcor	4	No
SFV- S 41	SDI-13,034	LS	Rock Room?	945	Santa Fe Valley Survey	Ogden 1992	Tested	Not Present	Balcor	4	No
SFV- S 43	SDI-13,035	BM/LS		232	Santa Fe Valley Survey	Ogden 1992	Tested	Present	Balcor	4	No
SFV- S 44	SDI-13,036	BM		6795	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Balcor	2	No
SFV- S 45/II	SDI-13,037/H	Oc/HT		24902	Santa Fe Valley Survey	Ogden 1992	Tested	Present	Balcor	2	Yes
SFV- S 46	SDI-13,038	BM/TC		163	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Balcor	3	No
SFV- S 47	SDI-13,039	LS		967	Santa Fe Valley Survey	Ogden 1992	Not Tested	Likely	Balcor	3	No
SFV- S 51	SDI-13,040	BM		34	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 53H	SDI-13,042H	HT		3768	Santa Fe Valley Survey	Ogden 1992	Not Tested	Likely	Specific Plan	3	Yes
SFV- S 55	SDI-13,043	Qu		56	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 58	SDI-13,046	BM		120	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 59	SDI-13,047	Qu/LS		77	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 60	SDI-13,048	BM	Rock Wall	210	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 61	SDI-13,049	TC		191	Santa Fe Valley Survey	Ogden 1992	Not Tested	Likely	Specific Plan	3	No
SFV- S 62	SDI-13,050	LS	Rock Ring?	7440	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 65	SDI-13,051	BM		39	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 69	SDI-13,052	Qu/LS	Cairns	74776	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	2	Yes
SFV- S 71	SDI-13,053	BM		15	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 72	SDI-13,054	BM		93	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 73	SDI-13,055	LS		11975	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 75	SDI-13,056	LS/BM	Rock Wall	5234	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 80/II	SDI-13,057/H	LS/HT		6368	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	McCrink	3	Yes
SFV- S 81	SDI-13,058	TC		638	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 82	SDI-13,059	LS		2429	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 83	SDI-13,062	TC		11975	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	McCrink	3	Yes

CULTURAL RESOURCES SITE SUMMARY

Ogden Temporary Number	State Trinomial	Site Type	Features	Area (sq. m)	Original Survey	Original Recorder and Year	Status	Subsurface	Specific Plan/ Tentative Map	Constraint Level	Anticipated Impacts
SFV- S 84	SDI-13,063	LS		4249	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 85	SDI-13,064	Qu/LS		2658	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 86	SDI-13,065	LS/Qu	Cairn	8900	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 87	SDI-13,066	LS/Qu		58875	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 88	SDI-13,067	LS		10551	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	Yes
SFV- S 89	SDI-13,068	LS/Qu/BM	Rock Wall	61152	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	2	No
SFV- S 90	SDI-13,069	LS/BM		16275	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	3	No
SFV- S 91	SDI-13,070	LS/Qu		2712	Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Likely	Specific Plan	2	Yes
	SDI-13,504	TC	-	400	Santa Fe Valley Survey	Ogden 1992	Tested	Present	Specific Plan	3	No
S/B- S 1	SDI-13,827	LS		35	Balcor	Ogden 1994	Not Tested	Not Likely	Balcor	3	No
S/B- S 3	SDI-13,828	BM		20	Balcor	Ogden 1995	Not Tested	Likely	Balcor	3	No
SFV- S 100		HS	Flume		Santa Fe Valley Survey	Ogden 1992	Not Tested	Not Present	Balcor/McCrink	1	No

KEY TO SITE TYPES

- Historic Sites
  - HS Historic Structure
  - HT Historic Trash Scatter
- Prehistoric Sites
  - LS Lithic Scatter
  - TC Temporary Camp
  - BM Bedrock Milling
  - RA Rock Art
  - Oc Occupation
  - Qu Quarry

† Mismapped at SDSU IC

* See text for site type descriptions

1 Important (Significant) - Unmitigable
2 Important (Significant) - Possibly Mitigable: Mitigation is possible but a high degree of uncertainty exists as to the success or feasibility of mitigation.
3 Potentially Important (Significant)/Important (Significant) - Mitigable: Mitigation possible through application of County approved construction/design practices and/or mitigation measures
4 Not Important: No mitigation required.

twelve previous cultural resource investigations within the Santa Fe Valley SPA. Three studies among those identified in the records search are especially pertinent given the level of analysis and synthesis of the C.W. Harris site (CA-SDI-149) and the San Dieguito Valley specifically, as well as the areas prehistory in general: Carrico and Ezell 1978; Carrico et al. 1993; Warren and True 1961.

Definition of Site Classes

A brief definition of historic and prehistoric site classes provides a more complete understanding of the level of activity at a given site. It should be noted that this classification scheme is applied to newly identified sites based on cursory inspection of the location under varying conditions of visibility; no subsurface testing has been undertaken at the majority of the sites. In the case of previously identified sites, classification is based on records maintained at the South Coastal Information Center at San Diego State University and the Archaeological Records Department of the San Diego Museum of Man as well as field inspection by the Ogden archaeological survey team.

Historic Sites

Historic resources are, according to the California Office of Historic Preservation, those cultural remains from the historic period (post European contact) in excess of 45 years old. Two classes of historic sites are presented for the following site summary:

Historic Structures. The definition provided by the National Register of Historic Places lists a structure as "a work made up of interdependent and interrelated parts in a definite pattern of organization." (36 CFR Part 60) (National Park Service 1989).

Historic Trash Scatter. This class encompasses both loose scatters and concentrations of historic trash, e.g., glass, ceramic, metal: and construction debris, e.g., brick, tile, mortar, lumber – not structural remains.

Prehistoric Sites

Prehistoric sites are those sites containing evidence of Native American activities predating European Contact. The term prehistoric is loosely applied to Native American sites containing European contact materials while emphasizing pre-contact artifacts and

traditional ways. Prehistoric sites are, for the purpose of this discussion, placed into one of five classes: lithic scatter, temporary camp, bedrock milling, rock art, and occupation sites.

Lithic Scatter. Lithic scatters are those sites containing predominantly chipped stone tools and tool production debris, i.e., flakes and debitage. Stone tools are postulated to serve a variety of functions, related to the acquisition and preparation of animal and vegetal materials, e.g., projectile points (arrow, spear and dart points), knives and scrapers. Typically, lithic scatters are interpreted to result from an extremely limited duration of occupation with a dominant activity focus. The density of materials can, and often does, increase as a result of nearby or onsite quarry activities.

Temporary Camp. Temporary camps are those sites containing a mixed assemblage of artifacts, i.e., stone tools/debitage and groundstone artifacts related to the processing of seeds and other vegetal materials as well as hunting related activities. These sites generally contain a wider variety tools than lithic scatters and are interpreted to represent several different subsistence foci. These sites are generally interpreted to represent a short term, possibly seasonal, occupation often related to the procurement and processing of specific resources available in a particular area .

Bedrock Milling. Bedrock milling stations are natural bedrock outcrops on which areas have been modified for the purpose grinding and/or pulping vegetal materials, i.e., seeds, bulbs, and roots. Bedrock stations often contain artifacts associated with the previous site classes. Conversely, it is not uncommon to locate bedrock milling stations where no surface evidence of associated artifacts can be discerned.

Rock Art Site. Rock art sites are those sites containing pictographs (paintings) or petroglyphs (pecked images) on and in stone. In the simplest of terms, such sites are one of the most tangible aspects of the aboriginal belief systems. Various interpretations, and ethnographic data associate such sites and the "art" they contain with aspects of birth, puberty, fertility, death, hunting, and other aspects of daily and spiritual life of the aboriginal inhabitants.

Occupation Site. The classification of a prehistoric archaeological site as an occupation site is based on both the diversity and density of artifacts, the occurrence of subsistence

materials. i.e., bone and shell, as well as the development of dark, greasy soils referred to in the archaeological nomenclature as midden soil.

Quarry Site. Quarry sites represent rock outcrops that were, in prehistoric times, exploited by the aboriginal inhabitants for stone used in the manufacture of tools. Quarry sites range from single bedrock outcrops with surface chipping scars reflecting human processes to massive outcrops of parent bedrock accompanied by numerous artifacts in various stages of production.

Site Summary and Discussion

Cultural resources survey of the Santa Fe Valley SPA has identified a total of 93 previously and newly recorded archaeological resources (Table 4.3-1). Resource areas are discussed initially according to their major archaeological components, that is, the site type that is exclusively and dominantly represented. A high degree of correlation is found between site type, potential importance, and mitigability (Table 4.3-1).

Newly Discovered Sites

Fifty-nine (59) archaeological sites – both historic and prehistoric – were newly recorded during the cultural resources survey of the Santa Fe Valley SPA. This inventory was dominated by lithic scatters or sites with a predominantly lithic component. Sites discovered during the survey were assigned permanent trinomial designation by the South Coastal Information Center located at San Diego State University. In addition, each site is labeled by a class reflecting the system proposed above (Table 4.3-1).

Previously Recorded Sites

The South Coastal Information Center provided site records for sites located within the Santa Fe Valley SPA and within a 1-mile radius of the project area. The relocation and characterization of previously recorded sites in the project area focused on those sites within the currently defined Specific Plan Area. Thirty-four (34) sites were identified as falling within this area. However, one site, CA-SDI-148, is believed to be mismapped and is actually located on the north side of Del Dios Highway, outside the project area.

Classification of previously identified sites is based on records maintained at the South Coastal Information Center at San Diego State University and the Archaeological Records Department of the San Diego Museum of Man as well as the results of the current survey. Table 4.3-1 summarizes these records and places each into the classification scheme presented above.

Previously identified sites along the San Dieguito River, including the C.W. Harris site (CA-SDI-149), and those identified during the recent SA 680 survey, were not reinspected during the Santa Fe Valley Specific Plan undertaking. The exceptions were: CA-SDI-12,659, CA-SDI-12,665, and CA-SDI-12,684. Reinspection of the two former sites was conducted as part of the pre-excavation reconnaissance related to the Balcor Tentative Map area cultural resources evaluation. This inspection identified extremely sparse deposits at the site locations. As a result of this inspection, it was determined that the sites should, according to County guidelines, be treated as isolated resources and not afforded treatment as cultural resource sites.

Reinspection of CA-SDI-12,684 was conducted in order to more fully record the rock art elements discovered during the SA 680/SF 728 Highway survey. In addition to the recording of previously identified pictograph elements, inspection resulted in the identification of a fourth locus; an additional rock art panel.

Prehistoric Sites

Lithic Scatters. Thirty-two (32) archaeological sites are categorized as containing a lithic scatter as the exclusive or major component (see Table D-1). Twenty-five (25) of these are considered important or potentially important under the CEQA definition described at the beginning of this section.

Quarries. Nine sites are considered to have dominant, if not exclusive, quarry components. Eight of these are considered important or potentially important. Additionally, four sites are recorded as containing a minor quarry component. The bulk of the quarry related activities were confined to the northeast portion of the project area.

Bedrock Milling Sites. Twenty-two (22) sites within the Santa Fe Valley SPA are recorded as having bedrock milling as their exclusive or major component. Eighteen (18) of these

are considered important or potentially important. Eight other sites contain minor components.

Bedrock milling sites are seldom, by themselves, deemed eligible for inclusion on the National Register of Historic Places. However, in combination with other components, eligibility is an increased possibility. This is especially the case when bedrock milling sites are directly or indirectly associated with occupation sites that are, by themselves, eligible for inclusion on the National Register of Historic Places. Archaeological site CA-SDI-149, located on the San Dieguito River, is such a case and survey sites CA-SDI-13,036 and CA-SDI-13,037/H, also located on the San Dieguito River, may be found to have such a relationship.

Temporary Camps. Fifteen (15) sites within the Santa Fe Valley SPA have been classified as temporary camps, either exclusively or as the dominant component. Ten of these are considered important or potentially important. The majority of the temporary camps are located on or near the three major drainages within the project area: the San Dieguito River, Lusardi Creek, and an unnamed creek that eventually emptying into the San Dieguito River.

Occupation Sites. Seven sites have been classified as occupation sites: four exclusively occupation sites, one with associated bedrock milling, one dominated by rock art, and one containing an historic trash scatter; five of these were previously recorded. All of these sites are considered important or potentially important.

Four of the occupation sites are located on the San Dieguito River; three of these have been previously tested and found to be important sites, eligible for nomination to the National Register of Historic Places: CA-SDI-316, CA-SDI-532/4,935A, and CA-SDI-4,935B. The remaining three sites are located along the unnamed creek crossing Section 19. It is possible that the drainage contained a perennial flow of water during prehistoric times.

Rock Art Sites. Two rock art sites have been identified within the Santa Fe Valley SPA. Both sites were located during the recent cultural resources survey for the proposed SA 680 highway alignment (Glenn 1992). The sites are located in a narrow drainage fed by the aforementioned unnamed "creek". Given their unique nature, both sites are considered eligible for nomination to the National Register of Historic Places and would, therefore, qualify as CEQA important cultural resources.

Historic Sites

Historic Structures. Four historic structures, including the Lake Hodges Flume, have been identified within the Santa Fe Valley SPA. All of the historic structures are considered important or potentially important. All four of the sites are believed to be associated with twentieth century farming/ranching activities.

Historic Trash Scatters. Six sites are recorded as containing historic trash as one of its components. In addition, historic trash is associated with most, if not all, of the five historic structures. Field inspection enabled gross categorization of these historic remains as belonging to the early- to mid-twentieth century. Most common were fragments of ceramics of various qualities, colored glass, and structural debris with no clear foundation. All but one of the sites containing historic trash are considered important or potentially important cultural resources. The exception is CA-SDI-12,658/H. The site has been recently tested and found not to meet CEQA criteria for an important cultural resource (Cleland 1993B).

4.3.2 Specific Plan Area Impacts

Criteria for Significance Determination

"If it can be demonstrated that a project will cause damage to a unique archaeological resource, the Lead Agency may require reasonable efforts to be made to permit any or all such resources to be preserved in place or left in an undisturbed state...To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required..." (CEQA, Section 21083.2(b) and (c).

Impact Analysis

Thirty (30) of 75 important or potentially important cultural resource sites will be significantly impacted as a result of development of the proposed project as currently designed.

Factors involved in constraint evaluations (evaluation of importance and potential for mitigation of impacts), which can only be accurately estimated subsequent to archaeological site testing, include: horizontal and vertical (depth) extent of the site, variety and complexity

of the site's artifact assemblage, the date(s) of occupation, the presence of archaeological features considered sacred by the Native American community, and the integrity (degree of disturbance) of the site deposit.

The following presents a summary of inferred site importance applicable to cultural resources of the Santa Fe Valley SPA. San Diego County Department of Planning and Land Use (DPLU) has determined that all cultural (archaeological) resources are important until such time that each individual site can be assessed through a limited testing (excavation) program. The issue of mitigation is, therefore, presented with the premise that each site will undergo, or has undergone, evaluation prior to establishing importance according to CEQA criteria.

Constraint Levels

The summary subsection, above, has provided a general discussion of each site type (see below for common mitigation measures). Each site has been assigned a constraint level (see Table 4.3-1). Constraint levels provide a guide during the preliminary planning stages with regard to site importance and potential for mitigation of impacts. Table 4.3-2 provides definitions for each constraint level. Emphasis must be given to preliminary nature of constraint level assignments in cases where testing or other evaluation has not taken place.

Eighteen (18) sites within the Santa Fe Valley SPA have been tested or otherwise assessed sufficiently to determine that they are not important resources by CEQA criteria. Site types represented include, in order of prevalence, lithic scatters, temporary camps, bedrock milling, a quarry site, and an historic trash deposit. Sites that do not meet the CEQA criteria of important resources are not considered impacted and are, therefore, removed from further consideration.

Fifty-eight (58) of the cultural resources identified in this study have been assigned to Constraint Level 3. The bulk of these sites are lithic scatters, temporary camps, and bedrock milling features. They are located throughout the project area. Mitigation of impacts to these sites is likely through the application of County approved construction/design practices and/or mitigation measures at moderate cost (see Table 4.3-2). A number of these sites may be reassigned to Constraint Level 4 subsequent to archaeological testing.

Table 4.3-2

SANTA FE VALLEY CONSTRAINT LEVELS

Level	Criteria
1	Important (Significant) - Unmitigable
2	Important (Significant) - Possibly Mitigable: Mitigation is possible but a high degree of uncertainty exists as to the success or feasibility of mitigation.
3	Potentially Important (Significant)/Important (Significant) - Mitigable: Mitigation possible through application of County approved construction/design practices and/or mitigation measures.
4	Not Important: No mitigation required.

Ten (10) sites are either important or potentially important cultural resources for which the ability to mitigate impacts is uncertain and/or costly (Constraint Level 2). The bulk of these sites are located along the San Dieguito River or associated with intensive quarry activities in the northeast portion of the project area.

Seven (7) sites have been categorized as Constraint Level 1. Four of these sites, including the C.W. Harris site (CA-SDI-149) from which was derived the oldest radiocarbon date from San Diego County, are located on the lower terrace of the San Dieguito River. The importance of these sites is well documented (Ezell and Carrico 1978; Warren 1966; Carrico et al. 1993). One of the sites is the Lake Hodges Flume, which is still in use. The remaining two are rock art sites located during the SA 680/SF 728 highway survey. The importance of rock art sites is not limited to their archaeological value. They are of special importance to the Native American community because of the site's association with religious and spiritual activities of the prehistoric occupants. All of these Constraint Level 1 sites are believed to be eligible for inclusion to the National Register of Historic Places and impacts to them can be mitigated only through avoidance to important portions of the sites. In addition, indirect impacts associated with nearby development may also be an impact and are undetermined at this time.

Impacts Related to Land Use

The level of impact is presented in terms of proposed land use under the Santa Fe Valley Specific Plan. Land use categories have been combined in order to present them relative to the degree of associated impacts. They include: Low or No Impacts, Moderate Impacts, and High Impacts. Low Impacts combine Open Space I and lands preserved under Open Space II. Preserved lands in the Open Space II designation occur in a small portion of the 18-hole golf course adjacent to the San Dieguito River Valley. Impacts to cultural resource sites in this area will be minimal, but possibly significant and, for the most part, associated with indirect impacts such as increased accessibility and the construction of hiking and equestrian trails. Moderate Impacts are restricted to Rural and Very Low Density Residential designations. These designations assume that site preservation through avoidance can be accomplished with deed restrictions and open space easements applied to individual lots. High Impacts combine Low, Medium, Medium High, and High Density Residential; active Open Space II; as well as all Commercial and Communities Facilities. The High Impacts category assumes that important cultural resource sites will be substantially impacted as a result of development.

Presented below are these categories combined with constraints level information for the overall SPA. In addition, these data are summarized in Table 4.3-3. This structure will also be applied to each of the Tentative Map areas.

Low or No Impacts Areas

Fifty-four (54) important or potentially important cultural resource sites are located totally or partially within Low Impact areas (Table 4.3-3). All seven (7) of the Constraints Level 1 sites are partially or fully contained within these areas (Table 4.3-2). In addition, seven (7) Constraints Level 2 and forty (40) Constraints Level 3 cultural resource sites are within the Low or No Impact areas. No development, aside from hiking and equestrian trails, are planned for these areas. This measure will provide the highest potential for site preservation.

Only general data regarding the placement and extent of impacts associated with proposed trails is available at this time. However, 15 and 20 foot corridors are currently proposed for unpaved and paved trails, respectively. In addition, cultural resources sites within Low

Table 4.3-3

CONSTRAINTS AND IMPACTS TO IMPORTANT OR POTENTIALLY IMPORTANT CULTURAL RESOURCE SITES: SANTA FE VALLEY SPA

Constraint Summary†

Anticipated Impacts*	Constraint Level 1	Constraint Level 2	Constraint Level 3
Low or None	7	7	40
Moderate	0	2	11
High	4	4	14
Total Impact Areas	11	13	65
Total Sites	7	10	58

Impact Summary

Dominant Site Type	Low or No Impacts*	Moderate Impacts*	High Impacts*	Typical Mitigation**
Bedrock Milling	15	1	2	Recording & Capping; Recording
Lithic Scatter	17	5	7	Data Recovery
Occupation Site	7	0	5	Data Recovery; Capping
Quarry Site	4	5	1	Recording; Data Recovery
Rock Art	2	0	0	Recording (with avoidance)
Temporary Camp	6	1	5	Data Recovery; Capping
Historic Structure	3	0	2	Recording
Historic Trash	0	1	0	Data Recovery; Capping

* Important or potentially important sites partially or fully within impact areas
** Mitigation measures other than avoidance
† Constraint level definitions are provided in Table 4.3-2.

or No Impact areas where revegetation will take place must be assessed for importance and impacts prior to clearing.

Moderate Impact Areas

Thirteen (13) important or potentially important cultural resource sites are located totally or partially within Moderate Impact areas: two Constraints Level 2 and 11 Constraints Level 3. Impacts to cultural resources within these areas can be significant. These are areas of proposed Rural and Very Low density residential units. As such, a great deal of latitude is available with regard to placement of structures. If sited correctly, impacts to cultural resources may be avoided. However, important sites within these areas that are dominated by a surface deposit would not be protected. These sites would likely be impacted by even low levels of use.

High Impact Areas

Twenty-two (22) important cultural resources are located totally or partially within High Impact areas. These include: four Constraints Level 1 sites, four Constraints Level 2 sites, and 14 Constraints Level 3 sites. Impacts to these sites would be significant. This level of development is associated with intensive land alteration techniques destructive to cultural resources.

4.3.3 Level of Significance

Seventy-five (75) important or potentially important cultural resource sites have been identified within the Santa Fe Valley SPA. Thirty (30) sites, located within Moderate and High Impact areas, will be significantly impacted as a result of development of the proposed project as currently designed. It is likely that most impacts to the cultural resources documented within the Santa Fe Valley SPA can be adequately mitigated through a combination of the mitigation measures presented below. It is also likely that many of the sites documented, but not yet tested, will be found not to be important according to CEQA, Appendix K. These sites would, therefore, be removed from requirements for mitigation of impacts beyond those provided by the required evaluation program.

With the implementation of mitigation measures in Section 4.3.4, all impacts to cultural resources will be mitigated.

4.3.4 Mitigation Measures

Archaeological resources are, by their nature, non-renewable. Once removed, whether by construction impacts, scientific excavation, natural processes, etc., they cannot be replaced. Mitigation techniques appropriate to mitigate impacts to important archaeological resources include, but are not limited to:

1. Mitigation through avoidance and placement of open space easements;
2. Mitigation through capping preceded by characterization of the site by means of limited data recovery (excavation);
3. Mitigation through data recovery (excavation) of a representative sample of the site with sample size determined by means of a limited testing program (excavation);
4. Some combination of the above.

Application of the mitigation techniques presented above represents, in most cases, adequate treatment of impacts to cultural resources. An elaboration of these techniques, using examples drawn from the Santa Fe Valley SPA cultural resources database, provides greater understanding of the mitigation techniques presented in CEQA guidelines. Refer to Appendix D, Cultural Resources Technical Report, for detailed descriptions of mitigation techniques.

In addition to the mitigation techniques presented above, an archaeological monitor may be required to be onsite during construction activities. The monitor's objective is to observe construction operations in the archaeological site area and safeguard archaeological features until such time as proper assessment of the discovery can be carried out.

Site-Specific Mitigation Measures

Mitigation measures are discussed according to Impact Areas, as defined above, for those sites that are important or potentially important according to CEQA criteria. Constraints Level assignment is also a consideration. Areas not yet surveyed should be assessed for cultural resources prior to approval of any development plans.

Low or No Impact Areas

Mitigation measures will not be necessary in areas where no impacts occur. Where impacts in these areas are present, mitigation through avoidance by means of project redesign is the preferred method. Sites accorded Constraints Level 1 must be avoided or impacts lessened to a level of no significant effect. Minor impacts are anticipated during the construction of hiking and equestrian trails across open space areas. Impacts associated with trails located along the San Dieguito River may be mitigated through avoidance. Avoidance in this area is to be achieved by restricting trails in this area to the existing road. In addition, no mechanical brushing or improvements are permitted, including ditches, culverts, and other similar undertakings. All trail development is to include archaeological consultation and possible onsite monitoring during trail development.

Areas in which trails are planned are to be surveyed for cultural resources if surveys have not yet been conducted. This would require that the potential trail corridor be flagged in the field and a professional crew of qualified archaeologists under the direction of a Society of Professional Archaeologists (SOPA)-certified supervisor transect the corridor spaced a maximum of 15 meters apart. Cultural resources identified are to be avoided through trail redesign. Trail reroute areas would then be surveyed to insure no cultural resources are present in the revised corridor. If avoidance cannot be achieved through redesign, the cultural resource sites will be evaluated for importance. If deemed important according to CEQA criteria, a research design for data recovery shall be developed and carried out as a impact mitigation measure.

Cultural resources sites within Low or No Impact areas where revegetation will take place must be assessed for importance and impacts prior to clearing. These impacts may be mitigated through project redesign and avoidance, data recovery, capping, or a combination of the above.

Moderate Impact Areas

This level of impact is associated solely with the development of Rural and Very Low density residential development. Where impacts cannot be avoided through site placement, deed restrictions, and open space easement, mitigation measures include site capping and data recovery. Site capping would include site characterization through test excavation, covering the resource area with clean fill material, i.e., sand or soil, and provide deed

restrictions limiting the type and extent of land use in cultural resource areas. The use of site capping as a mitigation measure is inappropriate for sites made up exclusively or predominantly of artifacts found on the surface due to the loss of specific artifact provenience, that is, location.

High Impacts Areas

Important cultural resources within areas of high impacts will be significantly impacted as a result of development activities. In general, site avoidance and capping techniques are not feasible in high impact areas without substantial project redesign. However, these are the preferred mitigation measures. Impacts to these sites are more typically mitigated through the use of data recovery techniques for those areas of the resource that are to be effected. A combination of preservation and data recovery methods may be applicable. In either case, monitor of construction activities in the areas in close proximity to important archaeological (cultural) resources will be required to insure against accidental damage to these resources. Further restrictive devices, such as temporary fencing around important cultural resources, may be required. A 50 foot buffer between the important part of the lower terrace sites and the development area is required.

Unsurveyed Areas

Areas where surveys have not previously been conducted will need to be surveyed and tested for cultural resources as necessary, prior to approval of descretionary permits. These areas are identified in the Cultural Resources Technical Report. Areas identified as permanent open space that have not been surveyed need not be surveyed as long as no development is proposed in these areas.

4.3.5 Tentative Map Area Impacts

Presented below are site summaries, importance and constraint categories, impact assessment given current planning, and concomitant impact mitigation recommendations for four areas of the Santa Fe Valley SPA for which subdivision tentative maps are proposed: Balcor, Seaton, McCrink Ranch, and Bernardo Lakes. Applicable regulations, site types, and mitigation measures follow those presented above.

Balcor Subdivision Tentative Map Impacts

The following analysis is based on a cultural resources report prepared for the Balcor Tentative Map area. Archaeological sites within the proposed Balcor Subdivision have been of interest to the archaeological community and the public since the 1920s (Rogers 1929). The property contains several sites associated with the San Dieguito cultural period, including the C.W. Harris site CA-SDI-149, as well as both La Jollan and Late (Yuman) period sites. A total of 25 cultural resource sites have been recorded within the area of the proposed Balcor subdivision (Table 4.3-4). Three of these sites, CA-SDI-11,825/H, CA-SDI-12,686, and the Lake Hodges Flume, are located on both sides of the boundary between the Balcor and McCrink proposed subdivisions. Site CA-SDI-148, recorded on maps at the South Coastal Information Center as being located on the Balcor property, is instead believed to be located on the north side of Del Dios Highway, outside the property. The site is, therefore, not included in totals presented.

Impact Analysis

The site inventory for the property includes a total of 25 sites: five sites with either exclusively bedrock milling or have bedrock milling as the dominant component; ten lithic scatters with one additional site locus, CA-SDI-319A, containing exclusively lithic debris; five occupation sites, including three sites located on the lower of the San Dieguito River; one historic structure, the Lake Hodges Flume; and four temporary camps, including the C.W. Harris site (CA-SDI-148).

A number of cultural resources sites contained within the proposed Balcor subdivision have undergone extensive testing and evaluation (Rogers 1929; Warren 1966; Ezell and Carrico 1978; Carrico et al. 1993). These documents, along with analysis of recently recovered materials, has resulted in the following significance evaluation.

Constraint Levels

Ten of the sites are considered not important according to CEQA criteria (Constraint Level 4). These include two bedrock milling sites, six lithic scatters, and two temporary camps (Table 4.3-4). Subsurface testing of CA-SDI-318 and CA-SDI-319A in 1990 and testing of CA-SDI-319B in 1990 and in 1991 has exhausted any research potential the sites may have possessed (Carrico et al. 1993; Van Horn 1991). Results from testing at

Table 4.3-4

CONSTRAINTS AND IMPACTS TO IMPORTANT OR POTENTIALLY IMPORTANT CULTURAL RESOURCE SITES: BALCOR TENTATIVE MAP AREA

Constraint Summary†

Anticipated Impacts*	Constraint Level 1	Constraint Level 2	Constraint Level 3
Low or None	5	4	4
Moderate	0	0	0
High	4	2	1
Total Impact Areas	9	6	5
Total Sites	5	5	5

Impact Summary

Dominant Site Type	Low or No Impacts*	Moderate Impacts*	High Impacts*	Typical Mitigation**
Bedrock Milling	3	0	0	Recording & Capping; Recording
Lithic Scatter	3	0	1	Data Recovery
Occupation Site	5	0	4	Data Recovery; Capping
Temporary Camp	1	0	2	Data Recovery; Capping
Historic Structure	1	0	0	Recording

* Important or potentially important sites partially or fully within impact areas
** Mitigation measures other than avoidance
† Constraint level definitions are provided in Table 4.3-2.

CA-SDI-11,825/H (Cleland 1993A) have determined that the portion of the site on Balcor property does not qualify as a CEQA important cultural resource. Testing at CA-SDI-12,660 (Cleland 1993B) has determined that this site does not qualify as an important cultural resource.

Five sites are considered important or possibly important, but impacts mitigable (Constraints Level 3) (Table 4.3-4). Four sites are outside the area of proposed development and/or within proposed open space areas and were, therefore, not tested.

Five sites are defined as Constraints Level 2 sites, that is, important, but possibly mitigable though a high degree of uncertainty exist with regard to feasibility. Three of the sites are within areas designated as Open Space I.

Five sites are considered important with no feasible mitigation to impacts beyond avoidance of important parts of the sites. Three of the sites, CA-SDI-149, CA-SDI-4,935B, and CA-SDI-316 are located primarily along the lower terrace of the San Dieguito River, although small amounts of artifacts continue upslope for a distance (Ezell and Carrico 1978; Carrico et al. 1993). The Lake Hodges flume is considered important according to CEQA criteria and is still in use; it is located within proposed Open Space I.

Impacts Related to Land Use

The level of impact is presented in terms of proposed land use. Land use categories have been combined in order to present them relative to the degree of associated impacts (see above). To reiterate, they include: Low or No Impacts, Moderate Impacts, and High Impacts. Twenty-five (25) cultural resource sites have been identified either totally or partially within the proposed Balcor subdivision. As a result of testing, ten of these sites are not considered important cultural resources according to CEQA criteria. According to CEQA, cultural resource sites not found to be important are removed from further consideration. Therefore, no impacts are associated with these sites. The remaining 15 sites are considered important or potentially important and are discussed below in relation to land use.

Low or No Impacts Areas

Eight of the important or potentially important cultural resource sites are totally within Low or No Impact areas. In addition, five sites, including the C.W. Harris site, are partially within these areas. Impacts to these sites will be restricted to proposed hiking and equestrian trails. In the case of Constraint Level 1 sites, impacts to important parts of these sites can be mitigated only through avoidance.

Moderate Impact Areas

None of the important cultural resource sites are located within areas of proposed moderate impacts, that is, Rural and Very Low residential development.

High Impact Areas

As currently proposed, High Impacts will occur at 7 of the 15 important or potentially important cultural resource sites within the Balcor subdivision. Impacts to the CA-SDI-149, located on the lower terrace of the San Dieguito River, are restricted to the eastern periphery of the site. A similar situation is present at CA-SDI-532/4,935A, located on the second terrace, where the southern, non-important portion of the site will be impacted. Although cultural materials were present in these areas, their density, geomorphological context, and correlation to the main site areas precludes them from contributing data beyond that acquired during the testing program.

The importance of CA-SDI-12,688 is based solely on observations of the surface. Once testing and data analysis are complete, an accurate assessment of the site's importance can be ascertained. As planned, the sites would be heavily impacted by development. Impacts to CA-SDI-13,037/H are restricted to the southern and eastern edge of Locus A.

Level of Significance

Five important or potentially important cultural resource sites will be significantly impacted as result of development under the proposed Balcor Tentative Map. As designed, the proposed development will destroy sites CA-SDI-11,825/H, CA-SDI-12,688, and the portion of CA-SDI-12,686 located within the Balcor Tentative Map area. Significant impacts are associated with those portions of CA-SDI-13,037/H within the proposed

development area. (i.e., the golf course in Open Space II). The remainder of the site is located in Open Space I and would, therefore, be within the area designated as Low or No impacts. As currently designed, development would significantly impact important portions of CA-SDI-316 and CA-SDI-4,935B.

With the implementation of mitigation measures in Section 4.3.4 and specific mitigation measures for Balcor tentative map impacts, all impacts to cultural resources will be mitigated.

Mitigation

Prior to approval of final maps, issuance of grading permits or improvement plans in lieu of grading permits, important parts of CA-SDI-149, CA-SDI-532/4.935A, and CA-SDI-4,935B shall be dedicated in a permanent open space easement. This shall include a 25-foot buffer for the important portion of the sites as defined by the Ogden testing. No part of the important portion of these sites shall be impacted by construction related activities. An archaeological monitor shall be present during the construction phase to prevent damage to the sites during the process. Temporary fencing will also be required during construction. In addition, there shall be no disturbance of the subsurface of the sites through future construction or other site intrusive activities. The open space easement shall preclude the placement of pipelines, utility poles, erosion control, landscaping (planting of large trees and shrubs), or any other surface or subsurface intrusions into the site. In addition, public access shall be restricted from any important site areas.

Prior to approval of final maps, issuance of grading permits or improvement plans in lieu of grading permits, the important parts of CA-SDI-316 and CA-SDI-13,037/H, Locus A shall be dedicated in a permanent open space easement. As currently designed, important portions of these sites will be impacted by construction related activities. Mitigation will be achieved by one of the following three methods: project redesign, capping, or data recovery of the impacted portion. Redesign will require the course be moved 75 feet to the east, thereby avoiding the important portions of the sites. Capping will be preceded by site indexing, that is, recovery of a portion of the impacted areas cultural remains by excavation of a test unit. Capping methods will require restricting construction to hand clearing of vegetation, no scarification of the ground surface, placement of protective mesh over the impacted site area, and capping with clean soil. The third mitigation alternative is data

recovery. This would require a representative sample of the impacted area be excavated, analyzed, and reported.

In addition to the mitigation measures proposed above, an archaeological monitor shall be present during the construction phase to prevent damage to the site during the process. Temporary fencing will also be required during construction. In addition, there shall be no disturbance of the subsurface of the site through future construction or other site intrusive activities. The open space easement shall preclude the placement of pipelines, utility poles, erosion control, landscaping (planting of large trees and shrubs), or any other surface or subsurface intrusions into the site. In addition, public access shall be restricted from any important site areas.

As currently designed, CA-SDI-12,688 will be impacted by the project. The site has not yet been tested for importance. Until such time as importance evaluation has taken place, the site is considered to be an important cultural resource. Mitigation of this potentially important cultural resource will be accomplished, if determined important, by either site avoidance or data recovery of a representative sample of the cultural materials.

Impacts to the potentially important site CA-SDI-12,686 will be minimal given that the bulk of the identified deposit is within the McCrink Ranch Tentative Map area. Testing and, if necessary, impact mitigation is not considered necessary as part of the Balcor Subdivision project.

Seaton Subdivision Tentative Map Impacts

No cultural resources have been identified within the area of the proposed Seaton subdivision. Therefore, no impacts to cultural resources are anticipated and no mitigation necessary.

McCrink Ranch Subdivision Tentative Map Impacts

Importance of sites within the proposed McCrink Ranch subdivision are, for the most part, based on information derived from reconnaissance survey data only. It should be noted that the northern portion of the McCrink Ranch property, located within Section 13, was not inspected. However, the entirety of this area is designated as proposed Open Space I and would, therefore, not be subject to direct impacts aside from proposed hiking and

equestrian trails. These trail areas will necessarily be evaluated as a condition of the major use permit.

Subsurface archaeological testing has taken place at CA-SDI-11,825 within the Balcor subdivision, at CA-SDI-12,658/H, as a part of the SA 680 highway program. Secondary inspection has occurred at the two rock art sites, CA-SDI-12,684 and CA-SDI-12,685/H. Secondary inspection has also occurred at CA-SDI-12,659 in an effort to verify location in relation to property boundaries. In addition, historical evaluation of the Lake Hodges Flume is sufficient to designate it as an important cultural resource according to CEQA criteria.

Impacts Analysis

A total of 18 cultural resource sites have been identified as falling exclusively or partially within the area of the proposed McCrink Ranch subdivision. Of these, 16 are considered important or potentially important cultural resources (Table 4.3-5). Two sites, CA-SDI-11,825 and the Lake Hodges Flume, are located on both the McCrink Ranch and Balcor properties. The ownership of the property on which site CA-SDI-12,685/H exists has not been firmly established. The site is located within a remote canyon near the McCrink Ranch property boundary. The property in and around the site is designated as Open Space I. Until such time as the location is fixed exactly, the site will be discussed in reference to the McCrink Ranch property.

Site types located on the McCrink Ranch property include: two rock art sites, one exclusively bedrock milling site, one historic trash deposit with a minor lithic component, nine sites dominated by lithic debris, and three temporary camps, one of which has a minor historic trash deposit.

Constraint Levels

Importance and concomitant constraints levels for unassessed sites are considered preliminary until such time as subsurface testing or alternative analyses have taken place. Only two sites, CA-SDI-12,658/H and CA-SDI-12,659, have been assigned Constraints Level 4. Although no subsurface testing has taken place, secondary inspection of CA-SDI-12,659 surface identified only a sparse scatter of lithic debris. The scatter is, therefore, redesignated as an isolate.

Table 4.3-5

CONSTRAINTS AND IMPACTS TO IMPORTANT OR POTENTIALLY IMPORTANT CULTURAL RESOURCE SITES: MCCRINK RANCH TENTATIVE MAP AREA

Constraint Summary†

Anticipated Impacts*	Constraint Level 1	Constraint Level 2	Constraint Level 3
Low or None	3	0	3
Moderate	0	0	0
High	0	0	10
Total Impact Areas	3	0	13
Total Sites	3	0	13

Impact Summary

Dominant Site Type	Low or No Impacts*	Moderate Impacts*	High Impacts*	Typical Mitigation**
Bedrock Milling	1	0	1	Recording & Capping; Recording
Lithic Scatter	1	0	6	Data Recovery
Occupation Site	1	0	0	Data Recovery; Capping
Rock Art	2	0	0	Recording (with avoidance)
Temporary Camp	0	0	3	Data Recovery; Capping
Historic Structure	1	0	0	Recording

* Important or potentially important sites partially or fully within impact areas
** Mitigation measures other than avoidance
† Constraint level definitions are provided in Table 4.3-2.

Thirteen (13) sites are categorized as Constraints Level 3 sites. These consist largely of lithic scatter sites, though other site types are represented. No sites are designated as Constraints Level 2. The two rock art sites and the Lake Hodges Flume have been designated as Constraints Level 1 sites.

Impacts Related to Land Use

Sixteen (16) cultural resource sites within the McCrink Ranch Tentative Map area are either important or potentially important. Two sites, CA-SDI-12,658/H and CA-SDI-12,659, have been assigned to Constraints Level 4 based on preliminary analysis of test data in the case of the former and secondary inspection of the latter. They are not included in the above totals or further discussions.

Low or No Impact Areas

Six of the important or potentially important sites are located within areas designated as Open Space I or passive Open Space II (Low or No Impact areas). These sites would not be subjected to direct impacts aside from those associated with hiking and equestrian trails. Among these sites are the two rock art sites and the Lake Hodges Flume; all of which are designated as Constraints Level 1 sites. Secondary impacts to the rock art sites that could result from increased access and chemical weathering as a result of vehicle exhaust is unknown at this time, but should be considered during development: the opportunity for vandalism is also a consideration.

Moderate Impact Areas

None of the areas within the McCrink Ranch Tentative Map area are designated as Rural and Very Low Residential. Therefore, no cultural resource sites are associated with the impact area.

High Impact Areas

Ten important or potentially important cultural resource sites have been identified within High Impact areas. Six of these sites are lithic scatters, three are temporary camps, and one is a bedrock milling site. This level of development will likely destroy these sites.

Level of Significance

As currently designed, the McCrink Ranch Tentative Map area will significantly impact ten important or potentially important cultural resource sites. These impacts will likely result in the partial or complete destruction of these sites. It should be emphasized that most of these sites have not been tested in order to assess their importance according to CEQA criteria. Level of impact significance is directly tied to the site's designation as important.

With the implementation of mitigation measures in Section 4.3.4 and specific recommendations made for the McCrink Ranch tentative map impacts, all impacts to cultural resources will be mitigated.

Mitigation

Mitigation measures applicable to cultural resource sites are preliminary. This is a function of the preliminary nature of the constraints level assignments given the lack of subsurface testing in the majority of cases. Sites not tested or otherwise assessed will, necessarily, undergo testing or evaluation prior to confirmation of this preliminary assessment.

No mitigation recommendations, beyond the general measures presented for the Santa Fe Valley Specific Plan in general, are possible given the uncertainty regarding the importance. However, those sites found to be important subsequent to testing are likely candidates for data recovery if avoidance cannot be achieved.

In the case of the rock art sites, efforts should be made to intensively investigate and record the site. In addition, an effort should be made to restrict access to these important and fragile cultural resources.

Bernardo Lakes Subdivision Tentative Map Impacts

Impact Analysis

The following analysis is based on a cultural resources technical report prepared for the Bernardo Lakes Tentative Map.

Eleven (11) cultural resource sites have been identified within the proposed Bernardo Lakes subdivision. These include: four sites exclusively or predominantly bedrock milling: one quarry site with a lithic scatter component: five temporary camps: and one occupation site with an historic structure.

Constraints Levels

The level of evaluation among the sites within the proposed Bernardo Lakes subdivision varies. Eight of the sites have been evaluated by subsurface testing. Evaluation of importance has resulted in six of the sites being assigned to Constraints Level 4, i.e., not important according to CEQA criteria. Four sites have been designated as Constraints Level 3 sites, that is important or potentially important. Data on these sites is limited to surface survey. Subsurface testing or further evaluation will be necessary to determine importance according to CEQA criteria. One site, CA-SDI-10,493. has been determined important as a result of subsurface testing, Constraints Level 2 (Table 4.3-6).

Impacts Related to Land Use

Five of the sites within the Bernardo Lakes Tentative Map area are important or potentially important according to CEQA criteria. Impacts to these sites is presented in terms of land use, i.e., Low or No Impacts, Moderate Impacts, and High Impacts. Definitions for these areas are presented in Section 4.3.2.

Low or No Impacts Areas

Five important or potentially important sites are fully or partially located within proposed Low or No Impact areas and would not be subjected to direct impacts except those associated with development of hiking and equestrian trails.

Moderate Impact Areas

No Rural or Very Low Residential (Moderate Impact) areas are planned for the Bernardo Lakes subdivision. Therefore, no impacts to cultural resource sites are associated with this impact area.

Table 4.3-6

CONSTRAINTS AND IMPACTS TO IMPORTANT OR POTENTIALLY IMPORTANT CULTURAL RESOURCE SITES: BERNARDO LAKES TENTATIVE MAP AREA

Constraint Summary†

Anticipated Impacts	Constraint Level 1	Constraint Level 2	Constraint Level 3
Low or None	0	1	4
Moderate	0	0	0
High	0	1	0
Total Impact Areas	0	2	4
Total Sites	0	1	4

Impact Summary

Dominant Site Type	Low or No Impacts*	Moderate Impacts*	High Impacts*	Typical Mitigation**
Bedrock Milling	2	0	0	Recording & Capping; Recording
Occupation Site	1	0	1	Data Recovery; Capping
Temporary Camp	2	0	0	Data Recovery; Capping

* Important or potentially important sites partially or fully within impact areas
** Mitigation measures other than avoidance
† Constraint level definitions are provided in Table 4.3-2.

High Impact Areas

One site, CA-SDI-10,493, is partially located within an area of proposed residential units and almost entirely within a proposed park site, and would be subject to direct impacts.

Level of Significance

Six sites have been sufficiently evaluated to determine that they do not meet CEQA's criteria for importance. The importance of three of the sites has yet to be determined and are, therefore, considered potentially important. CA-SDI-5,616 has been determined important according to CEQA criteria (Cheever et al. 1986). All of these sites are located in proposed open space. As such, no significant level of impacts is anticipated beyond those associated with hiking and equestrian trails. The remaining site, CA-SDI-10,493, will be significantly impacted if current development plans are carried out.

With the implementation of mitigation measures in Section 4.3.4 and specific mitigation measures for Bernardo Lakes tentative map impacts, all impacts to cultural resources will be mitigated.

Mitigation

Mitigation of impacts to sites within the proposed Bernardo Lakes subdivision can, for the most part, be achieved through standard practices of site avoidance or data recovery. Two sites, CA-SDI-5,616 and CA-SDI-10,493, have been the subject of subsurface testing and determined important according to CEQA criteria. As currently proposed, CA-SDI-10,493 would be significantly impacted by residential development and a park. Mitigation of impacts can likely be achieved through a combination of avoidance and data recovery if complete avoidance is unfeasible. Mitigation is to be preceded by test excavations aimed at further refinement of important site areas within CA-SDI-10,493/H. The result of this test, along with a research design for data recovery, are to be a condition of the major use permit. All sites and site areas are considered important until testing determines otherwise.

4.4 VISUAL QUALITY/AESTHETICS

This section is based on field reconnaissance and the Visual Analysis prepared for the Existing Conditions Report for the Santa Fe Valley SPA (1993). Visual/aesthetic policies set forth in the County of San Diego General Plan, the San Dieguito Community Plan, and the San Dieguito River Park Concept Plan are used as a guide in the impact analysis.

The visual quality of an area is based on the aesthetic character of the area, defined by physical character (landform, vegetation, water, color, scale, texture, and diversity) and perceptual quality factors (harmony, vividness, adjacent scenery, cultural modifications, and scarcity). Physical character factors are the physical elements of which the landscape unit is built. It is the combination of these elements that construct the visual framework of a particular view.

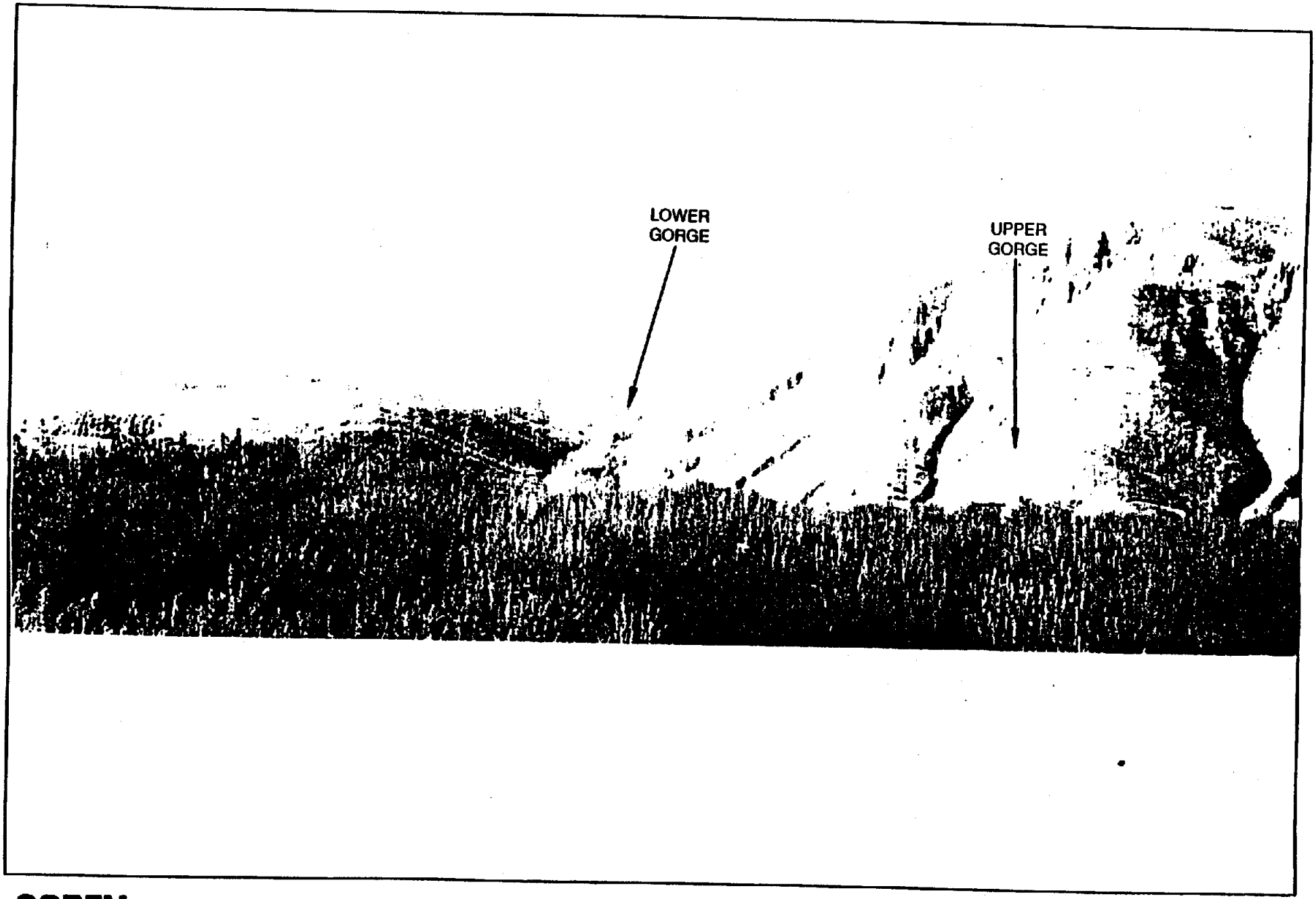
4.4.1 Existing Conditions

The existing visual quality of the Santa Fe Valley planning area is described in terms of topography and site characteristics, visual characteristics of the surrounding area, views associated with the project site, nighttime illumination, sensitive receptors, and applicable visual resource polices. These topics are discussed below.

Topography and Site Characteristics

The 3,163-acre Santa Fe Valley site is generally characterized by diverse topography featuring rugged, undulating terrain associated with the San Dieguito River Valley. The central and southern portions of Santa Fe Valley are characterized by gently rolling hills and intervening areas of more level terrain. Figures 4.4-1 through 4.4-6 and 4.4-8 through 4.4-9 show the general terrain, steep slopes and overall topography associated with the Santa Fe Valley project area. Figure 4.4-7 is a key map that indicates the locations from which the photographs used in Figures 4.4-1 through 4.4-6 were taken. Because much of the Santa Fe Valley SPA is inaccessible to the general public, the features near the edge of surrounding development, along existing public roadways, and the more prominent topographic features to the interior contribute most of the visual impression of the site.

Highly variable topographic relief is a defining characteristic of Santa Fe Valley. Elevations range from a low of approximately 80 feet above mean sea level (MSL) at the

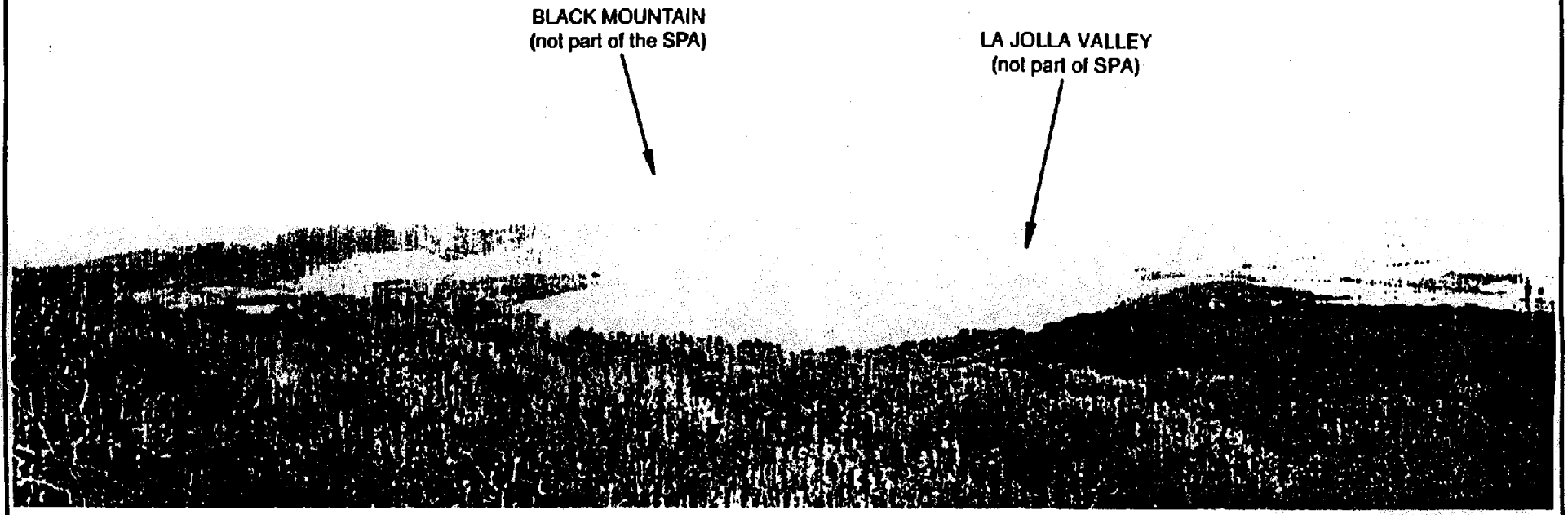


4.4-2

OGDEN

View of Santa Fe Valley SPA Looking West from Del Dios Ridge

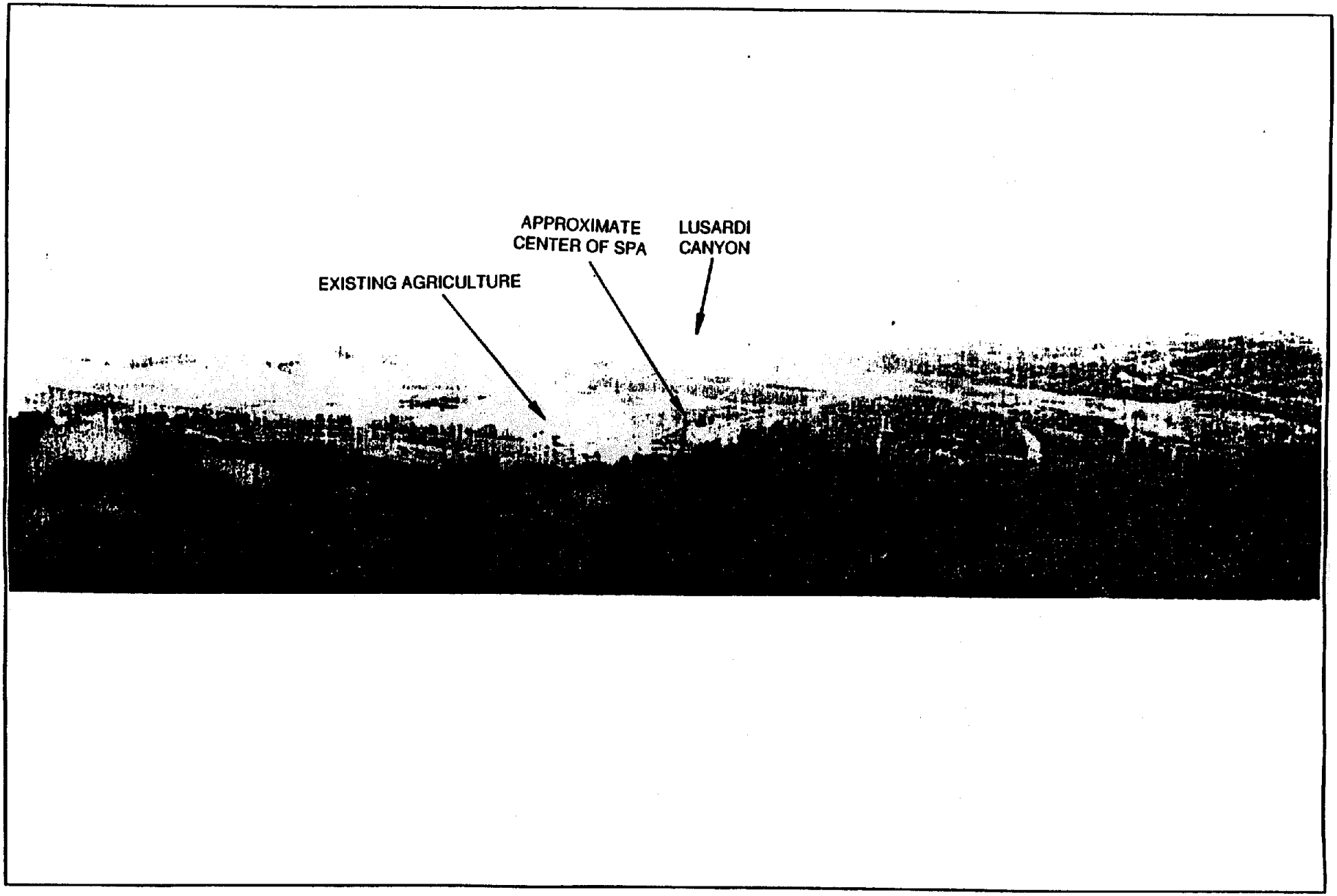
FIGURE
4.4-1



OGDEN

Santa Fe Valley SPA in Foreground Looking South from Del Dios Ridge

FIGURE
4.4-2

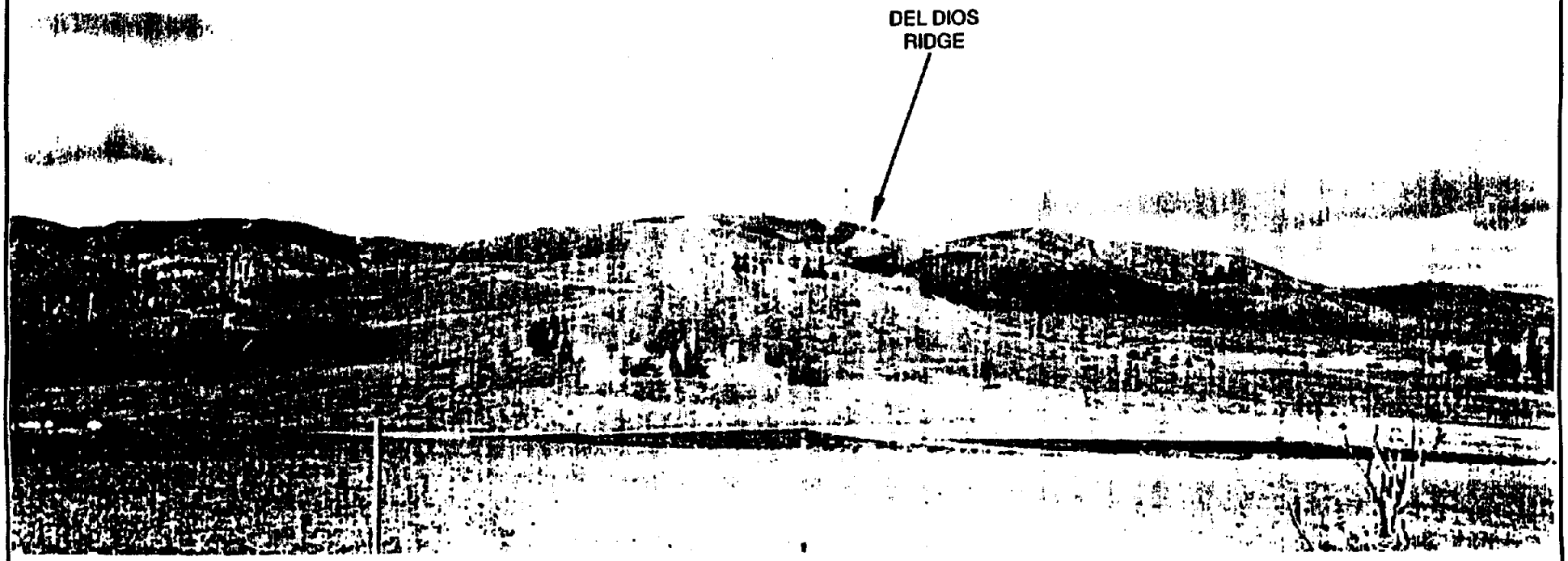


OGDEN

View of Santa Fe Valley SPA Looking Southwest from Del Dios Ridge

FIGURE

4.4-3



OGDEN

View of Santa Fe Valley SPA from Artesian Road
Looking Northeast

FIGURE
4.4-4

confluence of Lusardi Creek and the San Dieguito River in the southwest to a high of approximately 1,380 feet above MSL adjacent to and north of the hills above the Lake Hodges dam in the northeastern portion of the site.

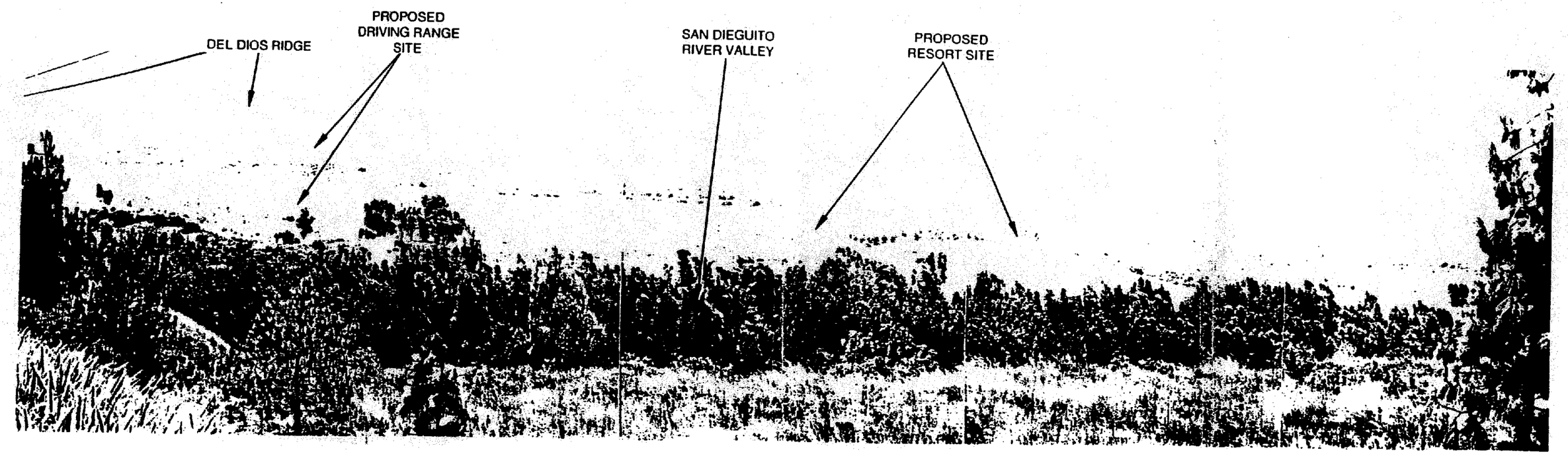
Approximately 8 percent (250 acres) of the site features slopes of greater than 50 percent grade, while nearly 36 percent (1,147 acres) of the site contains slopes having 25 to 50 percent grade. These steeply sloping areas are primarily located in the northeastern portion of the SPA (i.e., Cielo and Del Dios Ridges) and along the San Dieguito River and Lusardi Creek valleys in the southwestern portion of the SPA. Figures 4.4-8 and 4.4-9 illustrate onsite topography and slope.

The majority of Santa Fe Valley is generally undisturbed, undeveloped open space. Approximately 2,144 acres (67 percent) of the 3,163-acre site contain vacant/undeveloped natural open space. Approximately 996 acres (31 percent) of the project site are now or have been in agricultural use including three existing agricultural ponds. The agricultural operations are limited primarily to the more level mesa areas in the central portion of the site. The balance of the site contains approximately 20 widely scattered single-family estate-type residences. Development on the site also includes a San Diego Gas and Electric Company (SDG&E) electrical transmission corridor, and the San Diego County Water Authority's Second Aqueduct pipeline easement.

Santa Fe Valley has a variety of natural vegetation communities and habitats. Existing vegetation communities include coastal sage scrub, chaparral, wetland habitat associations, and both native and non-native grasslands.

Prominent Landforms and Visual Quality

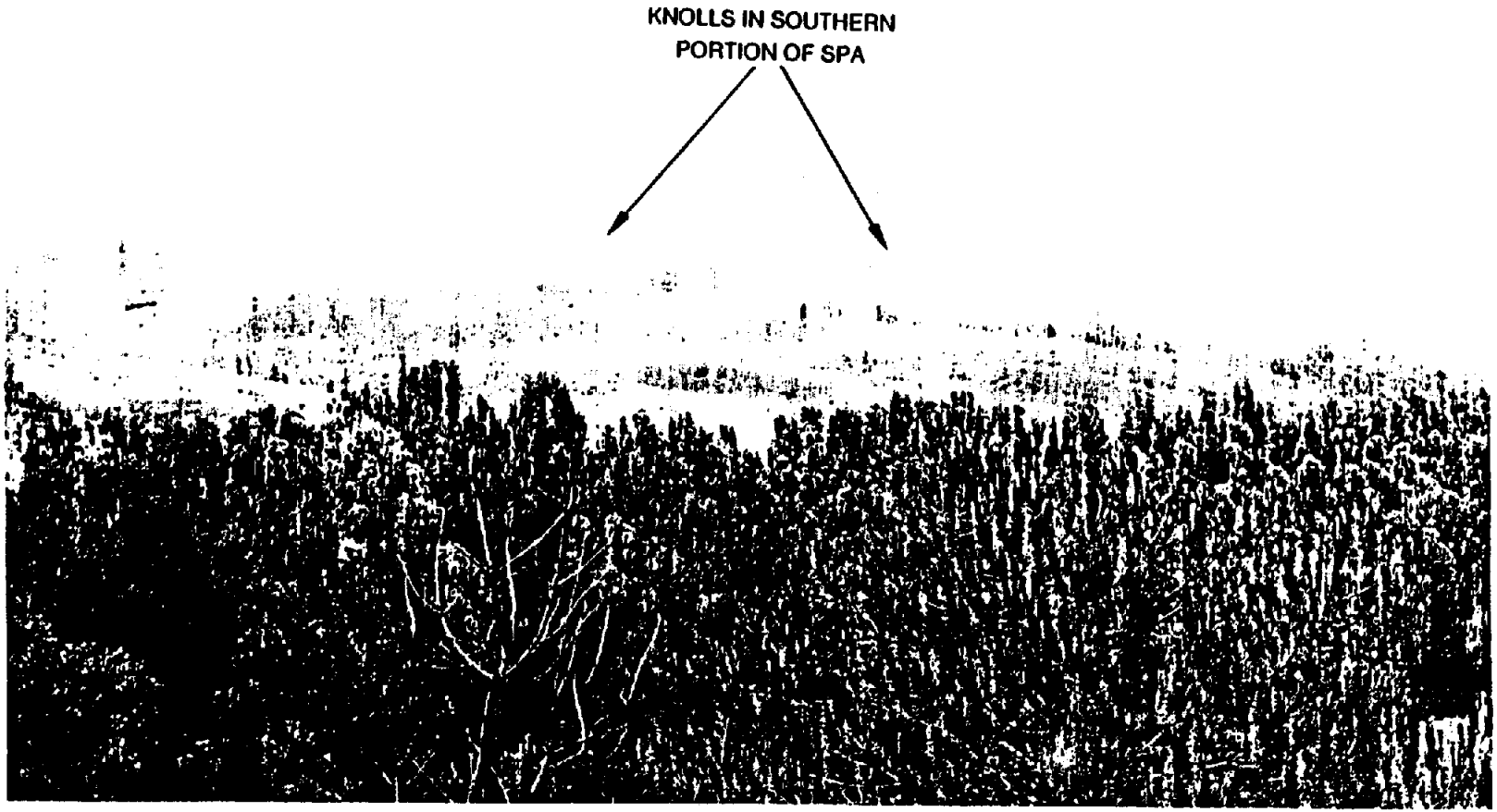
The San Dieguito River Valley, Lusardi Creek, and Cielo/Del Dios Ridges comprise the most prominent natural landforms in Santa Fe Valley. The San Dieguito River Valley is a natural landmark and the most dominant topographic/geomorphic feature onsite. The San Dieguito River flows through Santa Fe Valley on the northern boundary of the project site from the Lake Hodges Dam to its confluence with Lusardi Creek at the southwestern portion of the site and the northern end of La Jolla Valley. The associated site topography is characterized by gently rolling hillsides in the central portions of the site and steep, rugged canyons in the northeastern and southwestern portion of the site where topographic relief is greatest. Several small drainages traverse the site generally trending in a southeast-



GDEN

Views of Santa Fe Valley SPA Looking Southeast from Del Dios Highway

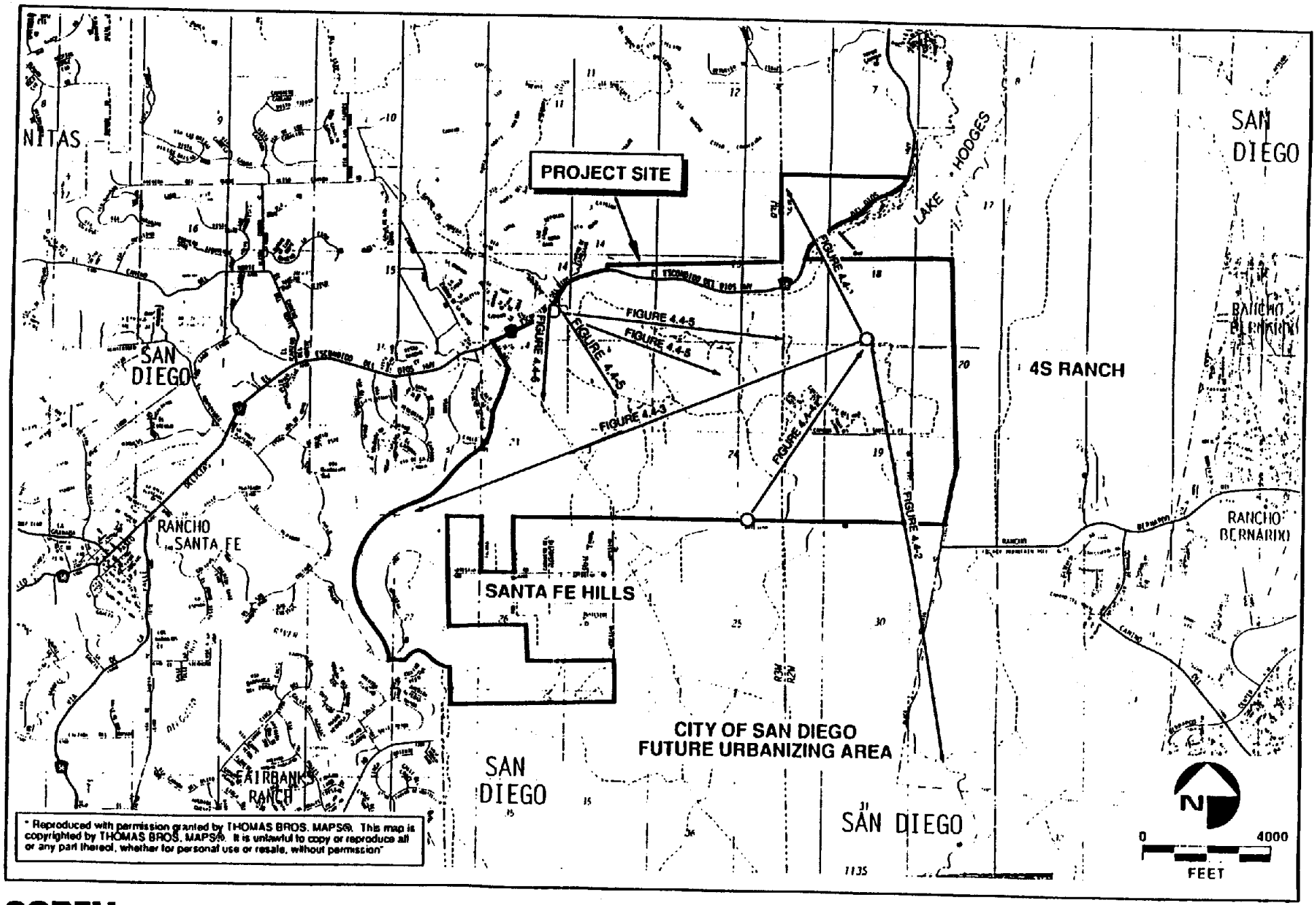
FIGURE 4.4-5



OGDEN

View of Santa Fe Valley SPA Looking South from Del Dios Highway

FIGURE
4.4-6



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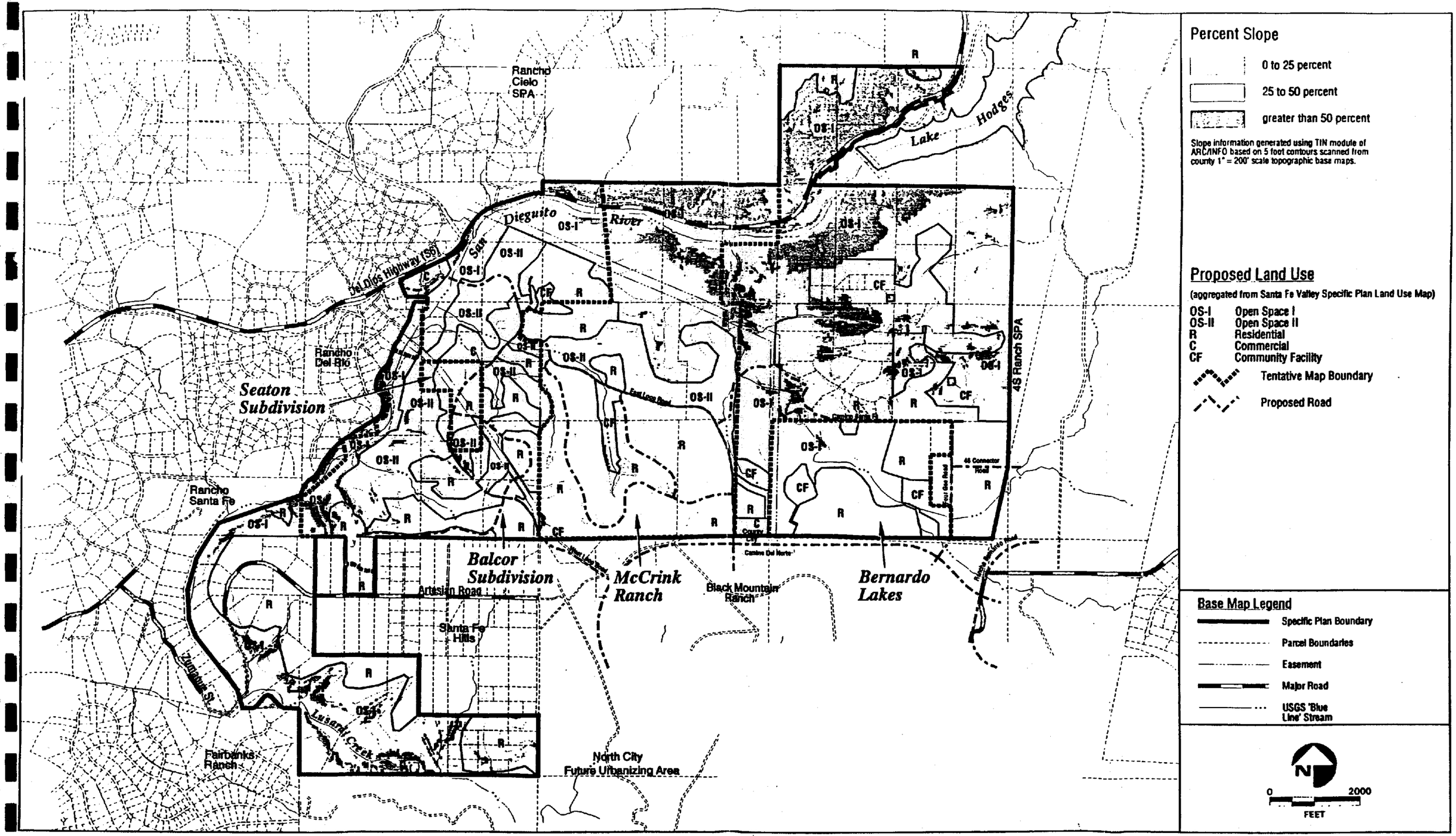
Key Photo Map

FIGURE 4.4-7



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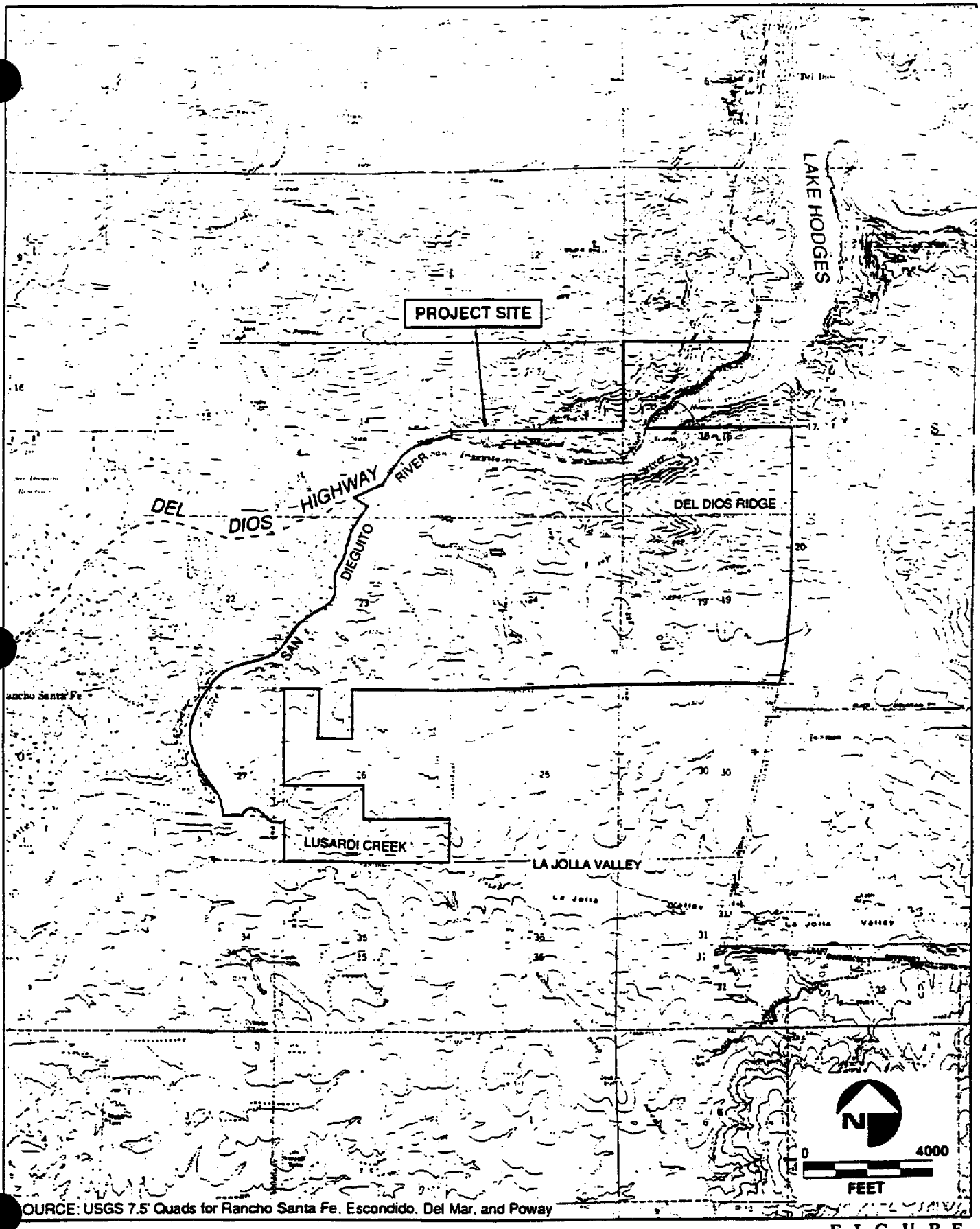
Proposed Land Use and Percent Slope Overlay

FIGURE
4.4-8

07/12/95



SOURCE: USGS 7.5' Quads for Rancho Santa Fe, Escondido, Del Mar, and Poway

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Santa Fe Valley SPA Topography

FIGURE 4.4-9

northwest direction until their intersection with the San Dieguito River and Lusardi Creek drainages.

The hillsides associated with the upper gorge surround the Lake Hodges Dam site and are divided by the San Dieguito River and Del Dios Highway. Cielo Ridge is to the north. and Del Dios Ridge is to the south of the gorge. The mountains are very exposed landforms which slope steeply into the upper gorge. These landforms represent the highest elevations and most topographic relief onsite. The slopes of these tall ridges create a heavily vegetated, yet rocky, backdrop for the river valley floor and lake.

Visual Characteristics of the Surrounding Area

A part of the Santa Fe Valley site's visual character is derived from the surrounding estate-type development. The communities of Fairbanks Ranch and Rancho Santa Fe exist to the west. Partially developed rural residential development is located in the Santa Fe Hills on the southern boundary of Santa Fe Valley. These communities are generally characterized as large-lot estate and suburban housing. These areas feature low-density development on rolling terrain with mature landscaping. Land to the south (the City of San Diego FUA) and east (4S Ranch) of Santa Fe Valley is generally undeveloped, but planned for future urban development.

Views

Views can be classified into following three categories:

Vista: An intermediate to far view which is restricted on either side by natural or man-made elements.

Wide Angle: A view encompassing a considerable viewing angle.

Panorama: A view which provides the observer with a great sweep of the natural setting and/or man-made cityscape.

In general, views of Santa Fe Valley should be classified as vistas because mature vegetation and topography restrict the expansiveness. However, because of the topographic complexities of the terrain, views of the entire SPA at any one time are nearly

impossible to achieve, except from the highest peaks in the nearby on and offsite mountains (e.g., Black Mountain and Cielo Ridge).

Onsite Views of the Property

Ridgelines along the eastern and central portions of the site obstruct views of the southern portion of the site from the valley floor and along Del Dios Highway . The higher ridges in the northeastern portion of the site are visible from locations throughout the southern, western, and eastern extent of the project vicinity. Long range panoramic views of the inner and southern portions of the site are visible only from areas higher in elevation than the valley floor and along Del Dios Highway (refer to Figure 4.4-1 through 4.4-3). A few onsite residences located on the southwestern slopes of Del Dios Ridge have long range panoramic views to the south and west including Black Mountain, La Jolla Valley, Lusardi Canyon and beyond.

Offsite Views From Adjacent Areas

Short-range, or close-up views to Santa Fe Valley are offered from motorists traveling along Del Dios Highway and recreation users of the San Dieguito River Valley as shown in Figures 4.4-5 and 4.4-6. Short range views of the project site also exist from the adjacent developing Santa Fe Hills residential area. There is very little intervening topography that obstructs short-range views of the site from Del Dios Highway or from the San Dieguito River Valley. Intervening vegetation exists in limited areas along Del Dios Highway and the San Dieguito River Valley. Del Dios Highway is a heavily traveled roadway accommodating a traffic volume of 16,800 average daily trips. However, because of travel speeds (up to 55 miles per hour) and the curvilinear configuration of the highway, views of the site from Del Dios Highway are generally short in duration (ranging from a few seconds to a few minutes).

Lighting and Astronomical Dark Sky

Two major observatories, Mt. Palomar and Mt. Laguna, are located within 50 miles of the Santa Fe Valley site (Mt. Palomar is located approximately 20 miles to the northeast, and Mt. Laguna is located approximately 44 miles to the southeast). Both of these observatories use large telescopes and conduct research in conjunction with major universities. In order for these two observatories to continue as high-quality astronomical

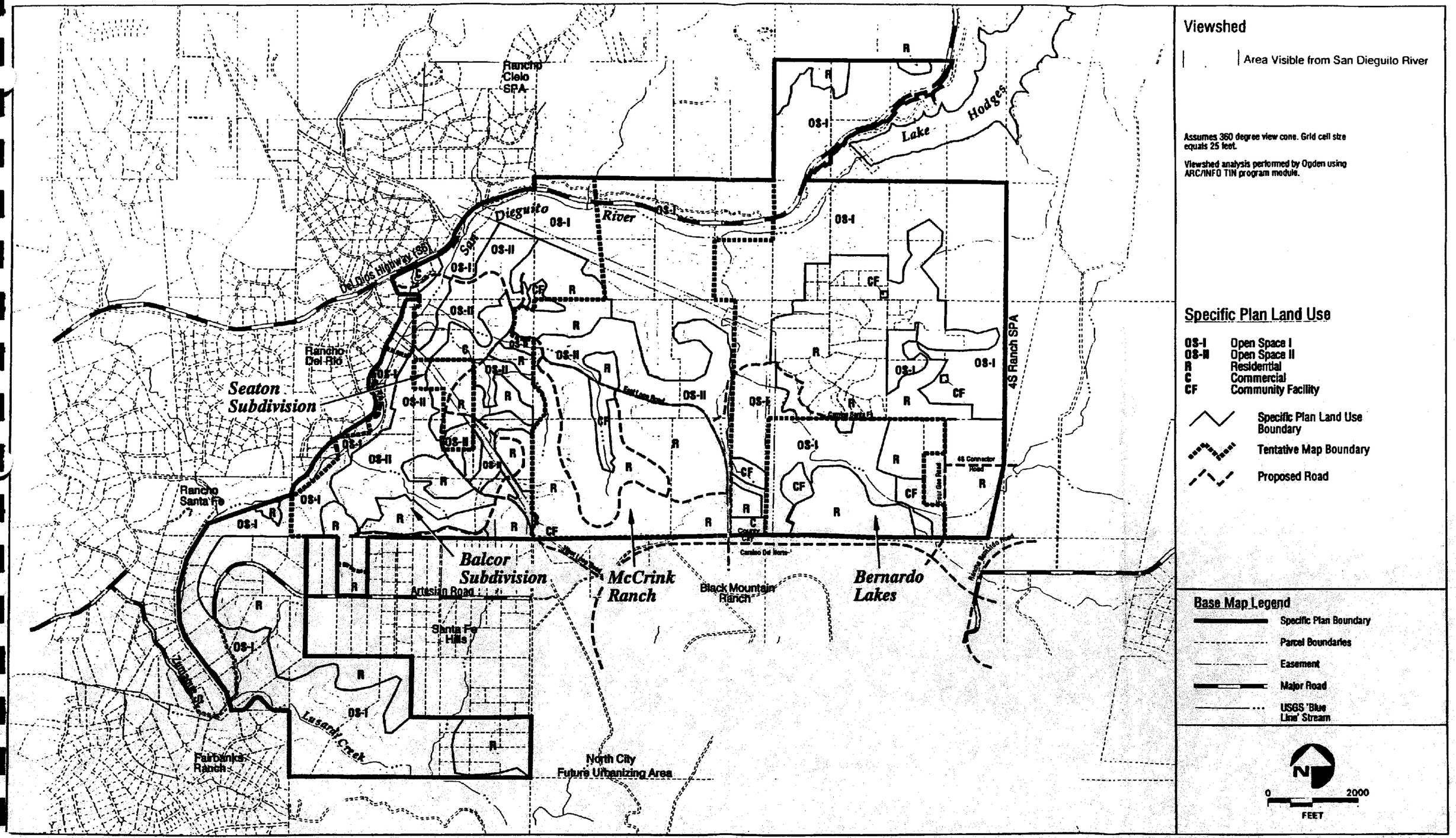
research sites, light pollution in the surrounding area (generally 30-40 miles) must be controlled.

The Santa Fe Valley site is currently not lit at night, with the exception of a few (approximately 20) scattered single family residences. The Santa Fe Valley SPA site is, however, surrounded by increasing amounts of urban development and street/home lighting.

Sensitive Visual Receptors

Visual receptors are those individuals who are sensitive to changes in visual quality or character. Visually sensitive receptors or vantage points are designated scenic highways or corridors, residential areas (if a different type of visible land use is proposed), and parks/recreation facilities. For the Santa Fe Valley SPA, the proposed San Dieguito River Park area and Del Dios Highway are considered sensitive receptors with respect to changes in landform and visual quality.

A Geographic Information System (GIS) was used to identify the views to the Santa Fe Valley site from the two sensitive receptors. The analysis considers topography and elevation but does not consider intervening vegetation. Figure 4.4-10 illustrates the viewshed from the San Dieguito River Valley. Most of the project site is visible from points along the San Dieguito River Valley. These views would be associated with future users of trails within the San Dieguito River Park. There is little intervening topography along the valley floor, however views of the site are intermittent and partially screened in some areas by intervening vegetation. Figure 4.4-11 illustrates the view to Santa Fe Valley as seen from a driver or passenger traveling either eastbound or westbound on Del Dios Highway. The viewshed analysis evaluated the area visibly from the roadway regardless of the number of times a particular area is visible (i.e., a distinction is not made between areas that are seen from only one location on the roadway and those areas that are visible from several points along the roadway).



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Viewshed from San Dieguito River

FIGURE 4.4-10

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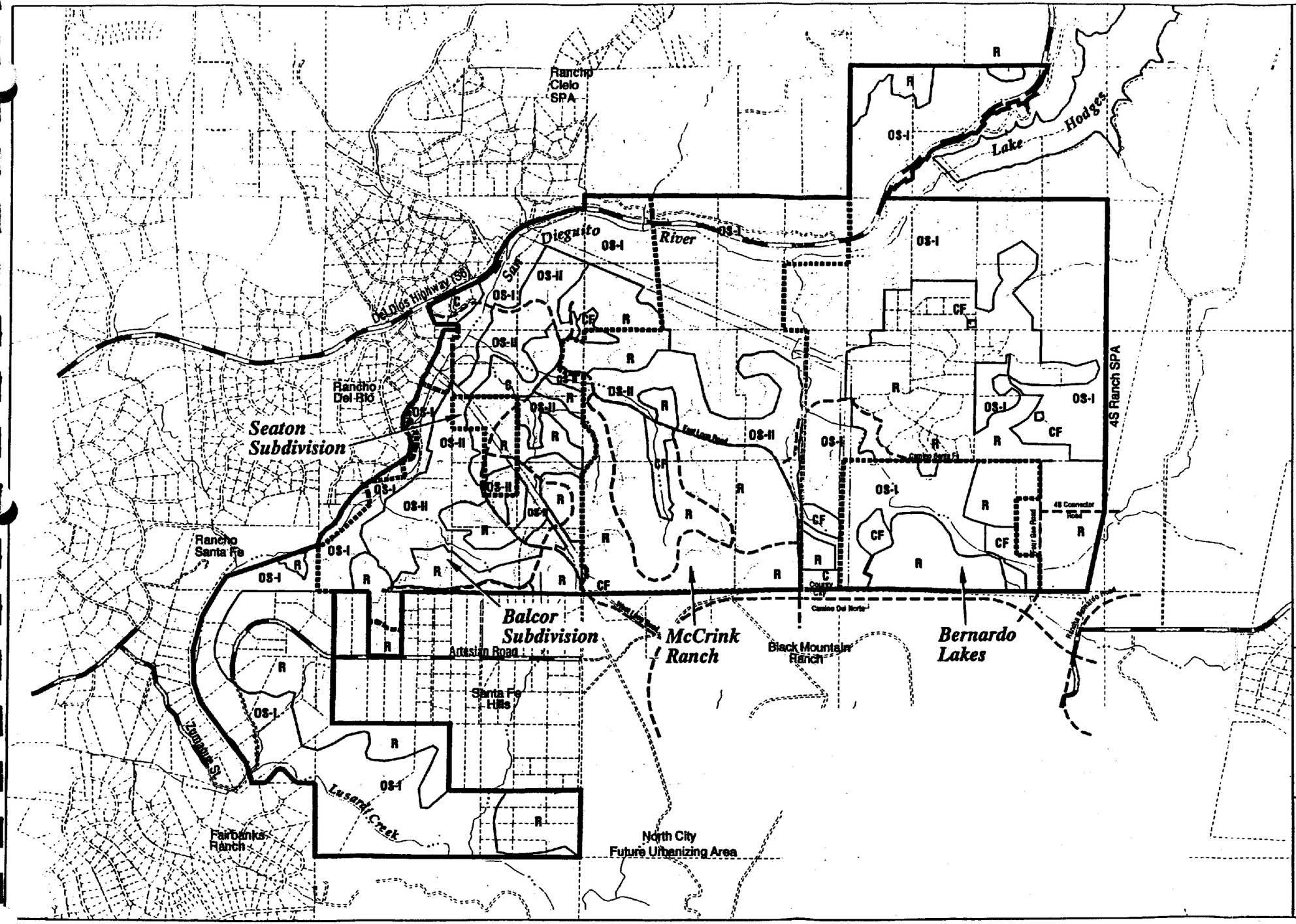


Viewshed

Area Visible from Del Dios Highway

Assumes 360 degree view cone. Grid cell size equals 25 feet.

Roadway segments, as defined by Spurlock Poirier Landscape Architects, were divided into subsections at those locations where the direction of the roadway changed. Observation points were established at the midpoints along the roadway subsections.

Viewshed analysis performed by Ogden using ARC/INFO TIN program module.

Specific Plan Land Use

OS-I	Open Space I
OS-II	Open Space II
R	Residential
C	Commercial
CF	Community Facility

Specific Plan Land Use Boundary

Tentative Map Boundary

Proposed Road

Base Map Legend

Specific Plan Boundary

Parcel Boundaries

Easement

Major Road

USGS "Blue Line" Stream

N

0 2000

FEET

OGDEN

Viewshed from Del Dios Highway

FIGURE

4.4-11

San Dieguito River Valley

As the setting for a future regional park along the San Dieguito River. the San Dieguito River Valley is an important sensitive receptor to views along the riverbed or future trail systems. The Focused Planning Area for the future river park includes much of the land within the Santa Fe Valley SPA along the San Dieguito River Valley open space corridor. Some areas of the SPA are not visible at all from along the river bed because of intervening topography and vegetation. However. as shown in Figure 4.4-10. many areas are highly visible from the riverbed.

Del Dios Highway

Del Dios Highway is a two-lane collector and is designated as Priority Two in the County's Scenic Highway Element as eligible to be designated a scenic highway in the County's General Plan. The highway takes a winding path through vacant open landscapes between Rancho Santa Fe and Lake Hodges. Del Dios Highway follows the river corridor and the future San Dieguito River Park for about 2 1/2 miles adjacent to the SPA. Additionally, because of the high number of viewers using the roadway, it is the primary sensitive visual receptor for the SPA development. Figure 4.4-11 shows areas within the SPA that are visible from Del Dios Highway.

Composite Visual Sensitivity

Figure 4.4-12 shows areas within the Santa Fe Valley having high, medium, or low visual sensitivity as seen from the Del Dios Highway and San Dieguito River viewsheds based on the Visual Site Analysis in the Santa Fe Valley Existing Conditions Report. Visual sensitivity is based on the degree of visibility of a landscape and an area's ability to absorb changes in overall visual quality/character or alterations to prominent landforms.

Applicable Visual Resource Policies

Visual policy and resource protection is addressed in three of the County's General Plan Elements: Land Use, Open Space and Conservation, and Scenic Highways. In addition, policies applying to the Santa Fe Valley Specific Plan Area have been adopted in the San Dieguito Community Plan and applicable zoning.

San Diego County General Plan: Land Use Element

The Land Use Element includes implicit visual objectives in the following goals:

> *Insure preservation of contiguous regionally significant open space corridors.* (Goal 2.6)
>
> *Protect lands needed for preservation of natural and cultural resources: managed production of resources; and recreation, educational, and scientific activities.* (Goal 3.1)

San Diego County General Plan: Open Space Element

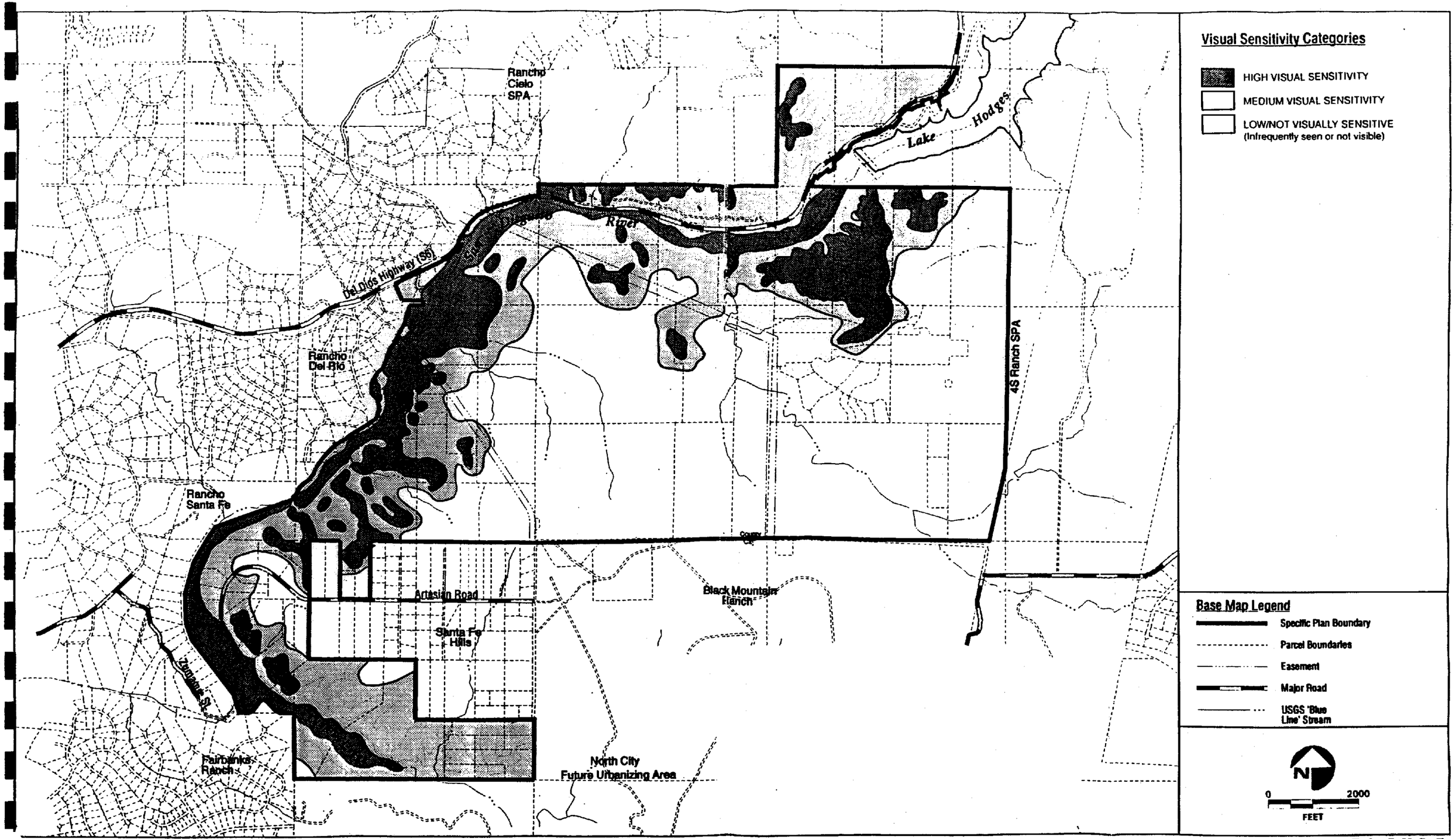
The Open Space Element discusses visual objectives in several ways, but emphasizes open space related to natural systems, protection of resources, recreation, education and scientific activities.

- A "General Goal" is to "..encourage and preserve those open space uses that distinguish and separate communities."

- Purposes and/or functions of open space in the category Countywide Recreation Areas include the following: "Countywide recreational areas provide areas of natural beauty for recreation and visual enjoyment". Objectives in this category include: Encourage the preservation of significant natural features of the County, including the beaches, lagoons, shoreline, canyons, bluffs, mountain peaks, and major rock outcroppings.

- Discussion of open space includes a category for "Flood plains". This category defines "Visual relief as a purpose of open space in flood plains."

- Discussion of the category Open Space Design of Private Lands includes the same objective as Recreation Areas to preserve "significant natural features..." and also includes the goal to "Distinguish and Separate Communities". This category provides for implementation through the EIR process, and zoning and subdivision regulation.



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Visual Sensitivity Composite Map of Views from Del Dios Highway and the San Dieguito River Valley

FIGURE 4.4-12

- Open Space for outdoor recreation is defined to include: "areas of outstanding scenic, historic and cultural value".

San Diego County General Plan: Scenic Highway Element

The County has designated Del Dios Highway as a Priority Two roadway to be designated a scenic highway in the Scenic Highway Element of the General Plan. The Scenic Highway Element is the portion of the General Plan which most explicitly discusses visual resources, and it identifies Del Dios Highway to be part of a future scenic highway system. In addition, the San Dieguito Community Plan incorporates all roads in the County Circulation Element within the Community Plan Area as Scenic Highways. The Scenic Highway Element encourages design standards to regulate visual quality of development within scenic highway corridors.

County of San Diego's Department of Planning and Land Use Guidelines (DPLU) for the Implementation of the California Environmental Quality Act (CEQA)

The intent of the County of San Diego's *Department of Planning and Land Use Guidelines for the Implementation of the California Environmental Quality Act* is to achieve greater consistency in the application of CEQA requirements in the preparation and administration of CEQA documents. Part V of these guidelines provides direction for the analysis of specific issue areas. The following discussion summarizes applicable direction for the analysis of visual quality/aesthetics contained in Part V of these guidelines.

Several County policies and regulations recognize and protect the aesthetic environment as an essential component of community/character and quality of life. The DPLU CEQA guidelines cite and emphasize these issues as evidenced by the following major categories of visual impacts identified in these guidelines:

i) Scenic Corridor Locations - The County's Scenic Highway Element is intended to protect and enhance scenic resources along designated roadways. Location on a scenic highway is a important indicator for significant visual impacts.

ii) Degrees of Visibility - Significance of a visual impact is directly proportional to the number of people who view the impact . . . scenic corridors are especially

important because of the large number of people who enjoy the scenic characteristics of a particular road.

iii) *Grading Impacts - If the proposed grading results in the removal of scenic resources, the visual impact can be significant.*

iv) *Architectural Issues - Buildings should be located and should be of such proportions to clearly relate to the project setting and to be compatible with offsite development characteristics . . . Concern for appropriate colors and material, provision of visual interest through avoidance of flat roof and wall surfaces, and provision of user amenities must all be demonstrated in the proposed design of structures.*

The DPLU's CEQA guidelines place emphasis on visual quality as defined in general for the County of San Diego by certain policies and ordinances, but also defined more specifically for each community planning area by the respective planning groups. Specific objectives for visual quality are closely tied to the character of the community as identified by members of that community. Each community plan provides goals, objectives, and policies related to community character and visual quality.

San Dieguito Community Plan

The San Dieguito Community Plan addresses visual resources as one of the most important characteristics of the community. The Santa Fe Valley is identified as a Specific Plan Area within the Community Plan. The Community Plan states that development of the specific plan should be compatible with the Estate Development Area (EDA) Regional Category.

Community character is an integral component of an area's visual quality. The Community Character Goal of the San Dieguito Community Plan is to "Provide for the orderly development of the San Dieguito Community Plan Area while maintaining the identities of historically established neighborhoods." The San Dieguito Community Plan further states that "The San Dieguito Community Plan Area is primarily an Estate Development Area with may idyllic, rural qualities." The Community Plan states that ". . . if Santa Fe Valley is developed as a Specific Plan, there will be a mixture of uses that would include . . . residential uses that would be compatible with the policies of the Estate Development Area

Regional Category." The Estate Development Area Regional Category combines agricultural and low density residential uses (parcel sizes of two to twenty acres apply).

Policies and recommendations for the Community Plan Area include the following:

> *Perpetuate the present state of spaciousness and rural living in the San Dieguito Plan Area.* (Policy 1)
>
> *Utilize the open spaces provided by low-intensity land uses to separate distinct neighborhoods.* (Policy 2)
>
> *Encourage the preservation and enhancement of the natural features located within the San Dieguito Plan Area.* (Policy 5)
>
> *Encourage high standards of design, materials, and workmanship in all construction.* (Policy 7)
>
> *Signs shall be regulated to prevent any adverse impact upon the basic character of the community or on property values.* (Policy 8)
>
> *In reviewing proposed development the County shall consider the following criteria:*
>
> a. *site topography and protection of steep slopes*
> b. *view orientation and view protection of adjacent properties*
> c. *natural site amenities such as trees, bluffs, rocks, and natural drainage channels*
> d. *protection of ridge lines* (Policy 10)

Dark Sky Ordinance

The County of San Diego has adopted a "Dark Sky" Ordinance to control light pollution in the unincorporated areas of the County (Division 9, Sections 59.101-15 of the County Zoning Ordinance). The project site is within Zone B of the Dark Sky Ordinance since it is located outside of the 15-mile radius around each of the observatories that are defined in the Ordinance as Zone A. The Ordinance requires the use of fully shielded low-pressure

sodium lamps for outdoor lighting or other lamp types within specific intensity limits, and includes compliance with other lighting standards as shown in Table 4.4-1.

San Dieguito River Valley Regional Open Space Park Policy

The San Dieguito River Valley has been widely recognized in the County as a unique visual resource. The County General Plan states that the San Dieguito River Valley is the last remaining major water course to retain its natural character. In 1989, the County joined with the cities of San Diego, Escondido, Del Mar, Solana Beach, and Poway to create the San Diego River Park Joint Powers Authority (JPA). The purpose of the JPA is to create a regional park along the length of the San Dieguito River Valley from Vulcan Mountain to the Pacific Ocean in Del Mar. Preservation of scenic quality is a key component of the JPA's major goals. The JPA adopted the Concept Plan for the River Park on February 18, 1994.

The Concept Plan provides recommendations for both public and private lands within the River Valley to achieve four major planning objectives, plus policies and actions concerning visual resources which are intended to be addressed by this and other Specific Plans or Sub-area Plans for each part of the river valley:

- Preserve Open Space
- Protect Natural and Cultural Resources
- Create a Scenic Trail System
- Establish Appropriate Recreational Areas

The JPA's jurisdiction lies within the Focus Planning Area (FPA) of the River Park. A large portion of the Santa Fe Valley SPA lies within the FPA boundary (Figure 4.4-13). The FPA boundary is based on the viewshed from the riverbed or valley floor. Within the river valley, the FPA boundary is intended to coincide with the bluff edge or functional ridgeline behind which development should be relatively unobtrusive to the open space character of the valley floor (San Dieguito River Park Concept Plan 1994). The FPA is identified by the JPA as the area where planning and acquisition efforts for the park are to be directed. The FPA boundary is not intended to establish a static demarcation between potentially developable and undevelopable land, but rather it serves instead to identify those areas where improper development could significantly impact the existing character of the river valley (San Dieguito River Park Concept Plan 1994).

Table 4.4-1

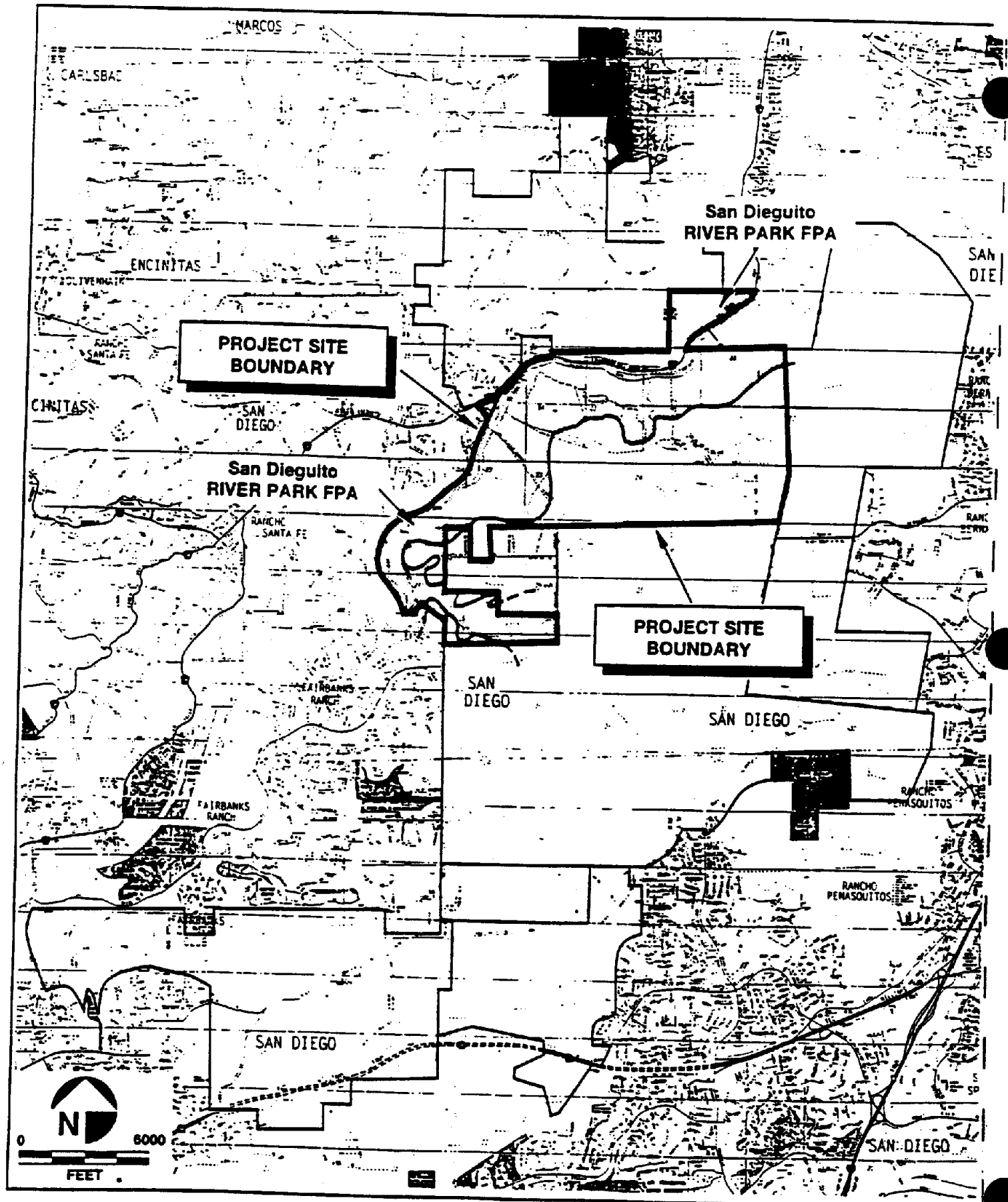
COUNTY DARK SKY ORDINANCE LIGHTING REQUIREMENTS APPLICABLE TO SANTA FE VALLEY

LAMP TYPE AND SHIELDING REQUIREMENTS PER FIXTURE

Lamp Type	Zone B Requirements
Class I - Color Rendition Important	
Low Pressure Sodium	Fully Shielded
Others above 4050 Lumens	Fully Shielded
Others 4050 Lumens and Below	Allowed*
Class II - Parking Lots, Security, Etc.	
Low Pressure Sodium	Fully Shielded
Others above 4050 Lumens	Prohibited
Others 4050 Lumens and Below	Allowed*
Class III - Decorative	
Low Pressure Sodium	Fully Shielded
Others above 4050 Lumens	Prohibited
Others 4050 Lumens and Below	Allowed*
Luminous Tube	Allowed*

* Lights shall be shielded where feasible and focused to minimize spill light into the night sky or adjacent properties.

Source: County of San Diego Zoning Code, Section 59-106.



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San Dieguito River Park FPA Within the Specific Plan Area Boundary

FIGURE 4.4-13

Although the County of San Diego has not officially adopted the San Dieguito River Park Concept Plan, visual policy goals of the Concept Plan are still applicable to Santa Fe Valley. These include the following:

Park Objectives

- Preservation of Open Space – Establish a continuous open space corridor throughout the length of the Focused Planning Area that preserves natural habitats, protects linkages for wildlife movement and provides compatible area for recreation opportunities.
- Conservation of Sensitive Resources – Preserve the existing natural character, visual quality, and sensitive resources of the open space corridor, including the preservation, enhancement, and protection of sensitive coastal wetlands, hillsides, riparian and other freshwater habitat, native vegetation, and historical and cultural resources.
- Establishment of Design Guidelines – The intent of the design objectives is to retain to the extent possible the rural character and small scale of development so that it impinges as little as possible on the natural, open space of the focused planning area.

The following specific visual policies are contained in the Concept Plan but may not be applicable to the Santa Fe Valley Specific Plan since the County has not adopted the Concept Plan:

Viewshed

- The viewshed from Lake Hodges and Del Dios Gorge shall be preserved as natural open space.
- To protect the viewshed in all areas of the river valley and tributary canyons, plans will be reviewed to ensure that proposed buildings and associated non-native landscaping on the ridgelines of the canyons overlooking the river valley and tributary canyons be designed and sited so as to minimize visual impacts as seen from the valley floor.
  - Dwellings and building pads shall be set back from ridges and bluffs throughout the river valley and tributary canyons to reduce their visual impact.
  - Particularly in areas of new subdivisions, every effort should be made to limit visibility of new construction from the valley floor.

- Landscaping shall use native vegetation types that blend with the surrounding natural areas.

Architecture

- Structures shall be fit to the land instead of the land to the structure.
- Structures in the park plan area shall be of a compatible color scheme and style which reflects the natural beauty of the surroundings.
- Development shall be designed to avoid sedimentation, erosion, and other potential impacts to the watershed and the viewshed.
- Where development is permitted clustering shall be encouraged to provide maximum open space, and the balance of the property shall be dedicated to open space in perpetuity.

The Concept Plan establishes the idea of developing the River Park as a "sequence of landscapes that have distinctly different character". Fourteen landscapes or sub-areas are identified - one being the Santa Fe Valley/Del Dios Gorge Landscape Unit. This area is roughly contiguous with the Santa Fe Valley SPA. The Concept Plan states that: "The character descriptions of each landscape will provide a basis for future design."

The Concept Plan contains special design considerations for the Santa Fe Valley/Del Dios Gorge Landscape Unit. These design concepts have not been officially adopted by the County. The Concept Plan recommends the following site specific design considerations when reviewing public and private development proposals within this portion of the FPA:

> *Future development proposals within this area should include the dedication of open space within the viewshed of the San Dieguito River consistent with the intent of the San Dieguito River Park Concept Plan...*
>
> *Future development proposals within this area should be consistent with the adopted San Dieguito Community Plan's Recreation Element which is defined as an essential objective of the Santa Fe Valley Specific Plan Area. The Recreation Element list the following objectives. Plan a Regional Park and Open Space System of a visionary nature, the focus of which will be the San Dieguito River Valley. The basic elements of this Park and Open Space System will be to:*

a. Maintain the scenic qualities of the San Dieguito River Valley;

b. Protect sensitive environmental resources throughout the SPA;

c. Link with open space systems established within the San Dieguito Community Plan Area and with adjacent jurisdictions"

The visual quality of Del Dios Gorge and the rural character of the Santa Fe Valley, as viewed from the FPA, should be preserved. Development should be clustered outside the viewshed. Where ownership lines do not permit clustering outside the viewshed, such as on the hillsides north of Del Dios Highway where subdivisions have already been approved by the County, then only low-profile, low-intensity development, should be permitted.

4.4.2 Specific Plan Area Impacts

Impact Methodology

The assessment of impacts to visual resources is subjective by nature because of the variation in human perception and preference. The characterization of visual impacts, therefore, must be based on explicitly stated criteria which allow the reader to evaluate the assessment process. Specific attention is placed on the aesthetics of designated scenic resources and the associated viewsheds. Specific Plan proposals for the protection of onsite visual resources is also discussed in this section.

The analysis concentrates on the long-term alterations in the viewshed as a result of the proposed project. Short-term construction-related effects on visual quality are considered to be nuisance-level impacts of a short duration and considered merely inconvenient to travelers and residents in the area, but would not be considered significant.

Identification of Potential Visual Issues. Four categories of visual quality issues have been identified for this analysis:

Visual Quality

- the level of visual quality that exists either on the SPA or directly adjacent to the site

- visibility of individual elements of the project (buildings, site clearing, grading, tree removal, construction of facilities, roads, parking lots, fences or other project-related features)
- the site's level of sensitivity to change and its ability to absorb changes to its visual character

Landform Quality

- the level of visual quality existing for landform units either on the SPA or directly adjacent to the site
- visibility of landform alterations
- the level of landform sensitivity to change

View Quality

- the level of scenic quality of the view scene within the SPA landscape
- the level of sensitivity of the identified viewers to a change in the view scene, or viewing corridor

Community Character

- the level of aesthetic consistency existing for the community directly adjacent to the site
- the elements within the area considered to be important community landmarks
- the level of sensitivity of the SPA to visual change, based on the capacity of the SPA to absorb changes to its community character

The impact significance criteria for the analysis of impacts to visual resources synthesizes the above mentioned visual issues into the following four categories: compatibility with the existing visual character/setting, substantial alteration of visually sensitive landforms, number of viewers, and compliance with applicable visual resource policy. Compatibility with the existing visual character/setting is measured by analyzing the potential for alteration of existing views or physical characteristics which would occur if the project were implemented. Landform alteration is measured by the degree or amount of project-related physical change (e.g., grading quantities or the introduction of large cut/fill slopes) that would occur to sensitive landforms. Number of viewers is a function of the level of urbanization in the area and the visual accessibility of a site. Policy compliance is an assessment of potential visual changes that would result from project implementation

compared to applicable goals and policies which have been adopted to protect visual resources.

Criteria For Significance

Impacts to landforms and other visual resources as a result of the project would stem from two types of activities: landform alteration (e.g., grading activities that alter the natural terrain) and the visual quality changes (e.g., actual development of the site). The significance of these activities would depend on the amount of landscaping and other design features that are incorporated into the project. The impact analysis focuses on the potential effects of the Santa Fe Valley Specific Plan development on existing accessible views of the project site.

The State CEQA Guidelines definition of environment includes "objects of . . . aesthetic significance (Section 15360)." Appendix G of the State CEQA Guidelines includes the statement that "a project will normally have a significant effect on the environment of it will . . . (a) conflict with adopted environmental plans and goals of the community where it is located; and (b) have a substantial, demonstrable negative visual effect." CEQA Section 15064(b) states that ". . . the significance of an activity may vary with setting . . . an activity which may not be significant in an urban area may be significant in a rural area."

Based on the above, significant landform/visual resource impacts would occur if any of the following result from the Santa Fe Valley Specific Plan development:

1) the project introduces substantial changes to the overall visual character of the community (including night lighting characteristics)

2) landform alteration results in cut/fill slopes in excess of 15 feet in height (unless created by contour grading techniques), or occurs in areas of significant or sensitive landforms including the following:

   - landforms of regional or local importance
   - landforms specifically protected by visual resource policies such as the Hillside Development Policy (Board of Supervisors Policy I-73) and the Resource Protection Ordinance (Ordinance No. 7631, as amended by Ordinance No. 7685)

- areas within the viewshed of an identified scenic area or highway

3) visually adverse landform alteration or other development occurs in areas visible to a large number of people (e.g.. visible from a scenic roadway or other public viewing areas)

4) the project is not in compliance with applicable visual resource/landform alteration policy

Significance determination is also supplemented by considering proposed project components intended to minimize detrimental visual impacts at the most visible locations.

Proposed Specific Plan Visual Resource Protection

The Santa Fe Valley SPA includes a variety of visual resources possessing a high degree of visual quality and visual sensitivity. In recognition of this, the proposed Specific Plan's Conservation and Open Space Plan uses two open space categories (Open Space I and II), totaling approximately 1,400 acres of land (refer to Figure 3-3) to provide a substantial amount of open space in the SPA. In the Specific Plan, land designated as Open Space I would be preserved as permanent open space. Land designated as Open Space II would allow active (e.g., a golf course) and passive recreational uses.

The visually sensitive lands proposed onsite to be conserved as permanent open space under Open Space I include: 1) areas along the San Dieguito River Valley that include the 100-year floodplain, high quality natural vegetation, and some slopes over 25 percent; 2) areas along Lusardi Creek that are within the 100-year floodplain, significant areas of natural vegetation: and 3) areas in the southwestern portion of the SPA containing biological resources considered to be of maximum sensitivity, and some slopes over 25 percent. According to the proposed Specific Plan, these areas are intended to be dedicated as part of a regional open space corridor and habitat preserve system.

The Open Space II areas are immediately adjacent to the Open Space I areas. These areas also contain some sensitive lands and are designated for recreational uses (e.g., golf facilities). Open Space II is planned to act as a buffer between the core habitat areas associated with Open Space I and developed areas.

In addition to open space preservation, the proposed Specific Plan includes a set of Design Guidelines. The goal of these guidelines is to establish a consistent design expression among site planning, engineering, architectural, and landscaping components. These guidelines contain both general guidelines for all subject development within the SPA as well as specific design for certain areas. Proposed development in the SPA subject to the Design Guidelines include: subdivisions (i.e., proposed tentative maps to subdivide land), multi-family residential structures, and all non-residential structures. These guidelines supplement County standards and regulations, including, but not limited to the Zoning Ordinance, Subdivision Ordinance, Uniform Building Code, and Uniform Fire Code.

The Design Guidelines for development within the SPA include: 1) subdivision design (open space linkages, clustering, viewshed determinations, road design, entry treatments, and grading), 2) grading (general grading, grading on slopes, phased grading, creative grading techniques, and retaining walls), 3) site planning (entry treatments, walls, fences, parking lots, site lighting), 4) non-single family residential site planning, 5) residential architecture, 6) non-single family residential architecture, 7) signage, 8) landscaping, and 9) hillside development.

A "D1" zoning designator is proposed (refer to Figure 4.4-14). The "D1" designator addresses Hillside/Ridgeline development, the purpose of which is to mitigate visual impacts of development in particularly sensitive hillside and ridgeline areas from the adjoining Del Dios Highway, San Dieguito River Park, and residential communities. These guidelines include: 1) subdivision design, 2) grading, 3) building characteristics, 4) rods and landscapes, 5) landscaping, 6) lighting, 7) fencing, and 8) drainage and erosion control.

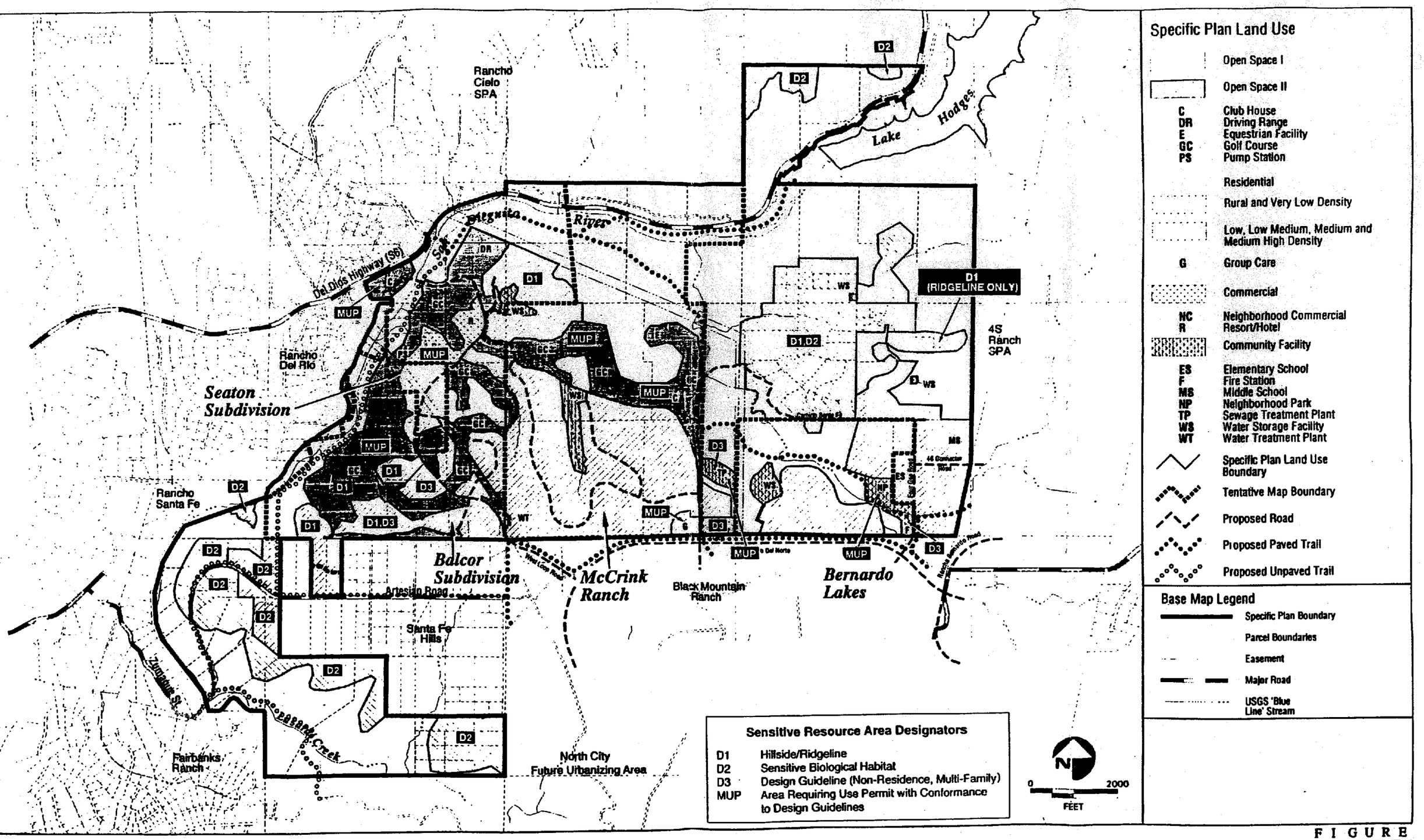
The "D2" designator establishes standards for site design in order to maximize preservation of sensitive biological resources. The standards of the "D1" and "D2" designators are contained in separate ordinances adopted concurrently with the Specific Plan.

The "D3" designator has been applied to land proposed for multi-family residential and certain non-residential development in the SPA. Standards and objectives of the "D3" designator are contained in the Design Guidelines.

Change to the Overall Visual Character of the Project Area

The SPA has high visual and landform quality. As shown in Figure 4.4-10, the area is highly sensitive because the proposed development would be visible from sensitive receptors and would produce a sharp contrast to the site's current undeveloped and scenic state. Specific elements onsite that are important community landmarks (e.g., undeveloped steep slopes and ridgelines in the upper gorge, and the San Dieguito River Valley floodway) would not be directly affected by the construction of the proposed project because these community landmarks would be preserved as part of the Open Space I designation. However, the larger viewscapes in the area, to which these pristine elements contribute, would be modified by the introduction of the proposed development in the less sensitive areas (refer to Figures 4.4-10, 4.4-11, and 4.4-12 which illustrate project site visibility).

The project would change the existing visual character of portions of the property from that of a primarily undeveloped natural area with scattered agricultural operations, to an urbanized area. Despite the permanent open space dedications proposed by the Santa Fe Valley Specific Plan, the current aesthetic character of the site would be altered by implementation of the project. Visual linkages of undeveloped land featuring high visual quality and high sensitivity to change would be disrupted by the introduction of moderate to intensive urban development. Because of the threat from wildland fires, fuel management activities would result in clearing brush from around structures, further scaring the natural landscape. However, the site is surrounded by developed or developing urban land uses (i.e., primarily residential estate development). Therefore, while undeveloped natural areas onsite would be converted to rural, large-lot and higher density residential/mixed development, the overall visual character of the area would be consistent in its developed state to areas which have or are planned for similar type uses. Therefore, significant impacts to the overall visual character of the areas would not occur (also see discussion of Policy Consistency and Conformance in this section).



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Sensitive Resource Area/Community Design Designators

FIGURE 4.4-14

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Dark Sky Compliance

The effect of increased light and glare as a result of night lighting would be considered adverse, but not significant, because of the proximity of other developed or developing urban land that is or will be illuminated at night. The driving range and golf course allowed within the Open Space II area would not be lit at night. Residential and commercial areas would emit light at night but the project would be required to comply with the County's Dark Sky Ordinance.

Alteration of Significant or Sensitive Landforms

Implementation of the proposed Specific Plan may involve significant amounts of landform alteration to allow for development proposed on land that is topographically varied and includes areas with steep hillsides and canyons. As noted in Figure 4.4-8, residential development is proposed in areas of steep topography and thus some grading in sensitive areas would occur to accommodate building pads and roads. This would involve substantial vegetation clearing, grading, and the creation of cut and fill slopes in excess of 15 feet in height to accommodate the development of residential structures and roads. Line, form, color, texture, visual patterns, and pristine character of the area would be altered. This could introduce changes to the edge and shape of existing prominent ridgelines and natural contours. Grading would also occur in areas of gently undulating hillsides to accommodate the proposed golf courses. Compliance with the design guidelines set forth in the Design Guidelines and the proposed "D1" designator for specified hillsides and ridgelines, would minimize landform alteration through specialized grading techniques (refer to Figure 4.4-14). The primary areas of potential impact to steep slopes (i.e., slopes of 25 percent gradient or steeper) are as follows:

- low density residential development in the northeastern portion of the SPA in the vicinity of Del Dios and Cielo Ridges

- residential and commercial (golf course, clubhouse, resort) development in the central portion of the SPA and along the San Dieguito River at the western boundary of the SPA

These areas are subject to the "D1" designator. or design guidelines for grading on hillsides. Proposed alteration of existing landforms in order to implement the proposed development would be substantial. Therefore. project-related adverse impacts to existing sensitive landforms are considered significant. but mitigable.

Visual Impacts in Areas Visible to a Large Number of People

Views of the SPA are comprised of areas that are seen by a large number of people although at a short duration from sensitive receptors along Del Dios Highway; and that may be seen by a large number of sensitive receptors in the future San Dieguito River Park. According to the visibility analysis (Figure 4.4-12), frequency of views of the northwestern slope of Del Dios Ridge and of the northern edge of the SPA along the San Dieguito River Valley is high from both Del Dios Highway and the San Dieguito River Valley. The Specific Plan proposes development of very low density residential estate-type housing on Del Dios Ridge. Frequency of views of the hills on the western edge of the SPA along the San Dieguito River Valley is moderately high from both Del Dios Highway and from the San Dieguito River Valley. The Specific Plan proposes development of low, moderate, and high density residential housing, and Open Space II uses, such as two golf courses, a bridge, clubhouse, resort and driving range, in the hills on the western edge of the SPA along the San Dieguito River Valley. This would involve vegetation clearing, grading/landform alteration, and the creation of cut and fill slopes to accommodate the development of residential structures, and roads and golf-related facilities. Much of this development would be within areas of high visual sensitivity for the San Dieguito River and Del Dios Highway. The remaining southern portions of the SPA are either not visible or infrequently seen from Del Dios Highway or the San Dieguito River Valley.

The County's Scenic Highway Element is intended to protect and enhance scenic resources along designated roadways. Scenic corridors are especially important because of the large number of people who enjoy the scenic characteristics of Del Dios Highway. Since the project would be located along a scenic highway, significant visual impacts would occur.

Development proposed by the Santa Fe Valley Specific Plan would be visible to the adjacent Santa Fe Hills development to the south of the SPA. The project proposes low, medium and high residential development, and portions of two golf courses within the viewshed of Santa Fe Hills. Views from this vantage point have low viewer quantity and development of this viewshed would be subject to the "D1" designator.

Some undeveloped areas within the SPA would be changed to more intensive urban settings. Substantial landform alteration would occur as a result of proposed development. These visual effects would be visible to a large number of people but would be softened by grading and landscaping techniques required by the "D1" designator and design guidelines. Therefore, significant, but mitigable visual impacts would result.

Short-term Impacts

Proposed development of the Santa Fe Valley Specific Plan would be phased over approximately 15 years. During this time, short-term visual impacts from grading and construction would occur on various parts of the project site through ultimate buildout of the project. The short-term visual effects of grading operations are generally unavoidable since little can be done to improve the aesthetics of the construction area, other than revegetation of exposed soils, until grading operations are completed. The grading and construction would be visible during buildout of the project from adjacent roadways, adjacent developed areas, and from the San Dieguito River Valley. These short-term impacts to visual resources would be adverse, but less than significant, since the impacts would be temporary and phased.

Policy Consistency and Conformance

The major areas to be conserved as part of the Open Space and Conservation Element of the Specific Plan include areas along the San Dieguito River Valley that include the 100-year floodplain, coastal sage scrub, riparian wetland habitats, and some slopes over 25 percent; and areas along Lusardi Creek that are within the 100-year floodplain, significant areas of coastal sage scrub, and riparian wetlands; areas in the southwestern portion of the SPA containing biological resources (natural vegetation) of areas that are visually sensitive, and some slopes over 25 percent. In order to conserve these areas, the Specific Plan designates the above areas as OS-I. The Specific Plan proposes implementation of mutual goals and objectives as described by the County's General Plan and San Dieguito River Valley Park Concept Plan. To minimize the visual impact of residential development on visually sensitive ridgeline and hillside property, the Specific Plan proposes the special area designators which set planning and design standards for development in the most topographically sensitive areas and in the Del Dios Highway/San Dieguito River Park

viewsheds. For a more detailed discussion of sensitive area designators and open space preservation proposed by the Specific Plan, refer to Section 3.4.1.

In regard to the aforementioned, the Santa Fe Valley Specific Plan is consistent with the applicable visual resource goals and policies set forth in the Land Use, Scenic Highway, and Open Space Elements of the County's General Plan (i.e., Land Use Element Goals 2.6 and 3.1; Open Space Element goals emphasizing preservation recreational opportunities, significant natural features, floodplains, and scenic open space corridors; and Scenic Highway Element goals to protect scenic resources along designated roadways). The Santa Fe Valley Specific Plan would be consistent with policies 1, 2, 5, 7, 8, and 10 of the San Dieguito Community Plan which emphasize the importance of visual resources within the San Dieguito Planning Area.

The Specific Plan would be consistent with the visual policy goals contained in the San Dieguito River Park Concept Plan that encourage contour grading, vegetation screening, and architectural treatment of structures. However, the Santa Fe Valley Specific Plan would not be entirely in compliance with the visual policy goals contained in the San Dieguito River Park Concept Plan which address minimization of landform alteration, with special attention to floodplains, canyons, and steep slopes. The Specific Plan does propose development in areas with steep slopes (greater than 25 percent gradient) visible from the San Dieguito River.

Development of the Specific Plan is subject to County of San Diego Guidelines for the implementation of CEQA which indicate that visual/aesthetic issues are potentially significant if the site contains steep slopes greater than 25 percent, the project site is adjacent to an identified scenic highway, or the project proposes cut/fill slopes that exceed 15 feet in height (refer to Section 4.4.5 for a more detailed discussion of cut/fill slopes). The project would have significant visual impacts within the viewshed of a scenic highway. Also, the project proposes numerous cut/fill slopes substantially higher than 15 feet. Therefore, the project would have significant policy-related visual impacts.

4.4.3 Level of Significance

Development of the SPA as proposed by the Specific Plan would result in substantial physical changes to the project site. The visual quality of the project site would be permanently changed from generally vacant natural open space and agriculture having high

visual quality to an urbanized setting. However, while the site itself is characterized as natural open space, the visual character of the overall project vicinity portrays an urbanizing Estate Development Area as described in the Community Character section of the San Dieguito Community Plan. Therefore, since the project proposes a similar type of development, substantial overall changes to visual aspects of community character would not occur. Site-specific visual impacts to natural open space areas as a result of the proposed development would be significant.

Landform alteration impacts to sensitive visual resources associated with Del Dios Highway, the San Dieguito River Valley, and adjacent development would be significant. Impacts would result from the introduction of man-made structures and infrastructure, cut/fill slopes in excess of 15 feet in height, vegetation removal, soil excavation, development on slopes having 25 percent gradient or steeper, and substantial amounts of grading. Many areas within these viewsheds are characterized as having high visual and landform quality and are highly sensitive to change. Significant impacts from landform alteration would substantially affect the viewshed of a designated scenic highway, including but not limited to unique topographical features, undisturbed native vegetation, and parks or recreation areas. The proposed mitigation would reduce significant project-related landform alteration impacts.

Visual impacts in areas visible to a large number or viewers would be significant since visually adverse landform alteration or development would occur in areas highly visible and frequently viewed along a designated scenic highway (Del Dios Highway). Project-related impacts would also be visible from other public viewing areas along the San Dieguito River Valley and from adjacent developed urban areas. Impacts from changes to the site's visual character and from landform alteration are significant. Therefore, such impacts visible to a large number of viewers would also be significant.

Impacts resulting from inconsistencies with applicable visual policy are significant. These impacts can be reduced by the proposed mitigation.

With the implementation of mitigation measures in Section 4.4.4, all impacts to visual quality resources will be mitigated.

4.4.4 Mitigation Measures

Implementation of the following mitigation measures will mitigate significant visual quality and aesthetic impacts:

- The project shall be required to comply with the "D3" design designator.

- Contour or landform grading techniques shall be used onsite to create undulations and variety in the grades of major slopes, closely matching the naturally occurring landforms. The tops and toes of slopes shall be rounded to blend into the surrounding area. Grading methods that enhance plant establishment and ensure long-term viability are recommended. Rock outcrops shall be preserved whenever possible. Tops and toes of slopes shall be rounded where they meet the existing natural grade.

- All areas disturbed or cleared of vegetation for construction shall be revegetated upon completion of construction activities. The selection of plant materials shall be compatible with the character of the landscape unit (i.e., native vegetation).

- The residential and commercial structures within designated viewsheds shall be designed utilizing materials, colors, textures, and scale that are compatible with the vegetation and rock outcrops on the surrounding slopes.

- Screening techniques shall include a combination of planted berms (where possible) to minimize direct views of the site development and the planting of trees and shrubs to block views of incompatible structures or man-made slopes.

- All construction on designated slopes and ridgelines shall be developed in compliance with the "D1" Designator for Visually Sensitive Hillsides/ Ridgelines.

- All non-single-family residential development: including but not limited to tentative maps, major use permits, and Administrative permits shall be implemented in compliance with the Santa Fe Valley Specific Plan Area Design Guidelines.

- Measures for protecting existing trees, native vegetation, rock outcroppings, and other natural features shall be indicated on grading plans.

- Single-family dwellings in designated viewsheds on existing greater than 15 percent slopes shall be encouraged to incorporate terraced foundations when necessary to reduce grading, avoid contiguous stair-stepped padded lots, and retain a more natural appearance. Significant vegetation, rock outcroppings, or other important natural features shall not be removed or disturbed. The proposed grading shall blend with the natural terrain. Grading to create excessive flat usable open space should be minimized. Proposed grading shall blend with the natural terrain.

- Phased grading shall be implemented to allow prompt revegetation and reconstruction to control erosion.

- Planting along the slope side of the development shall be designed to allow controlled views outward, yet partially screen and soften architecture. Tree species selection and placement shall be designed to be capable of exceeding the height of the top of the slope.

- Development located near or on a ridgeline or hilltop shall consist of larger lots with wider frontages whenever possible. Dwellings and building pads shall be set back from significant ridges and hilltops to reduce visual impact whenever possible.

- The facades of structures should be angled at varying degrees as required to follow the natural topography of the site.

- All cut/fill slopes over 15 feet in height shall be screened with appropriate visually compatible vegetation planted at the base of the slope, and extending up the slope as necessary to provide visual intervention to sensitive receptors.

- Lighting for structures and adjacent landscape shall comply with the Dark Sky Ordinance and the Santa Fe Valley Design Guidelines.

- Golf courses and the driving range shall not be lit at night.

4.4.5 Tentative Map Impacts

Balcor Subdivision Tentative Map Impacts

The Balcor subdivision proposes development of an 18-hole golf course, with a clubhouse, maintenance buildings, and driving range; a resort; water retention facilities; a bridge over the San Dieguito River Valley which would provide access from Del Dios Highway; and low, medium, and high density residential areas.

Change to the Overall Visual Character of the Project Area

Visual elements in the area that are important community landmarks would be altered by the proposed construction of residential housing, roads, a bridge, a resort, an 18-hole golf course, with clubhouse, and driving range (Figure 3-8). The principal site-specific effect would be on the undeveloped knolls in the southwestern portion of the project area, and on the undeveloped San Dieguito River Valley abutting the western edge of the tentative map area (see Figures 4.4-12 and 3-8).

The project would change the existing onsite visual character of the tentative map area from that of a primarily vacant/undeveloped natural area to an urbanized area. This change would alter the site's appearance having an adverse effect to onsite visual quality. However, the site is adjacent to developed urban land uses (i.e., primarily residential estate development). Further, development proposed by the Balcor Tentative Map would preserve the most sensitive elements of the natural open space corridors and keep the natural character of the San Dieguito floodway intact. The golf course design is a links style course which would provide a visual transition from the Open Space I area to developed residential land uses to the southeast of the golf course. Therefore, while some undeveloped natural areas onsite would be converted to large-lot, estate-type residential/mixed development, the overall visual character of the area would not experience a substantial change since the project proposes land uses that are similar to, and compatible with, the surrounding community.

The effect of increased light and glare as a result of night lighting would be considered adverse, but not significant. The golf course and driving range are not proposed to be lit at night. The project would have to comply with the County's Dark Sky Ordinance.

Alteration of Significant or Sensitive Landforms

Large cut/fill slopes would be created in order to accommodate the proposed residential development and golf facilities. Residential development in the northeastern portion of the tentative map area would result in cut slopes up to 50 feet vertical distance over approximately 150 feet in horizontal distance. Residential development in the southern portion of the tentative map would result in cut slopes ranging up to 60 feet vertical distance over 200 feet horizontal distance in size, and fill slopes up to 50 feet vertical distance over 150 feet horizontal distance. Development of the proposed driving range would involve cut/fill grading to smooth topographic variation. The new manufactured slope would be approximately 80 feet in height and extend over a distance of 800 feet. but would be similar to the grade of the existing slope. Fill slopes for the proposed clubhouse would range up to approximately 80 feet in height and extend a horizontal distance of 200 feet. Grading quantities associated with the Balcor Tentative Map would be substantial. Grading for this subdivision would total 3,000,000 cubic yards of balanced cut and fill.

Implementation of the Balcor Tentative Map subdivision would result in the creation of large cut and fill slopes and would require substantial amounts of grading. Some limited grading and creation of manufactured slopes associated with the golf course would occur in and adjacent to the 100-year floodplain of the San Dieguito River, and on the steep slopes in the southwestern portion of the tentative map area. Therefore, landform alteration impacts would be significant. However, compliance with the design guidelines set forth in the Community Design Guidelines and the proposed "D1" designator for specified hillsides and ridgelines, would minimize landform alteration through specialized grading techniques (Figure 4.4-14 illustrates areas subject to the "D1" designator).

Visual Impacts in Areas Visible to a Large Number of People

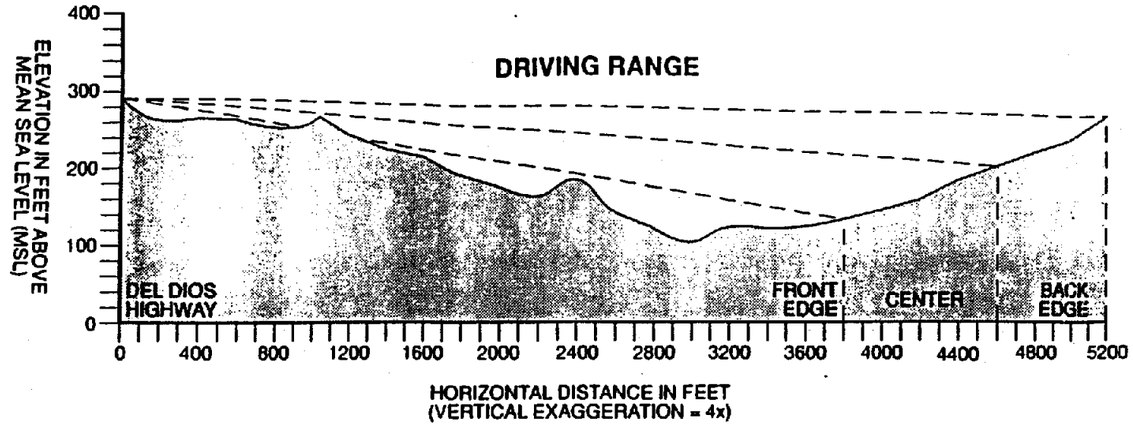
The Balcor Tentative Map area is visible to a large number of viewers from several different areas. As shown in Figures 4.4-10 and 4.4-11, most of the tentative map area is visible to some extent from the San Dieguito River Valley, and the majority of the subdivision area is visible to some extent from Del Dios Highway. Figure 4.4-12 illustrates areas within the tentative map area that are visually sensitive. According to the visibility and frequency analyses, frequency of views of the hills on the western edge of the tentative map along the San Dieguito River Valley is moderate to high from both Del Dios Highway and from the

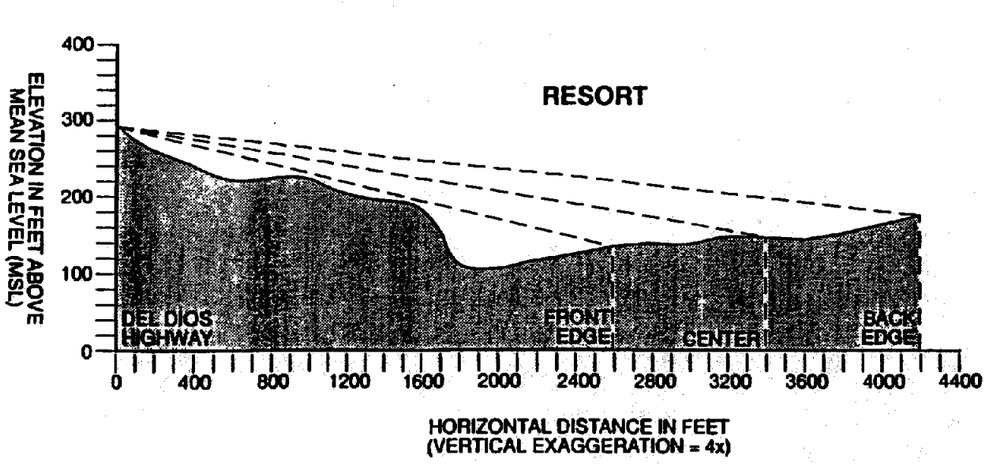
San Dieguito River Valley (Figure 4.4-12). The tentative map proposes development of low, medium, and high density residential housing and portions of an 18-hole golf course in the hills on the western edge of the SPA along the San Dieguito River Valley. The proposed clubhouse, driving range, resort, bridge, medium density residential uses, and portions of the golf course are within the short range viewshed of Del Dios Highway and the San Dieguito River Valley. Figure 4.4-15 provides a cross section of short range views of the driving range and resort from one vantage point along Del Dios Highway. Figure 4.4-15 is a topographic cross section but does not take into account the ameliorating effects of intervening vegetation. Figure 4.4-16 is a key map of site lines used for the cross sections described in this section. As seen from Figure 4.4-15, the driving range and resort are visible from Del Dios Highway.

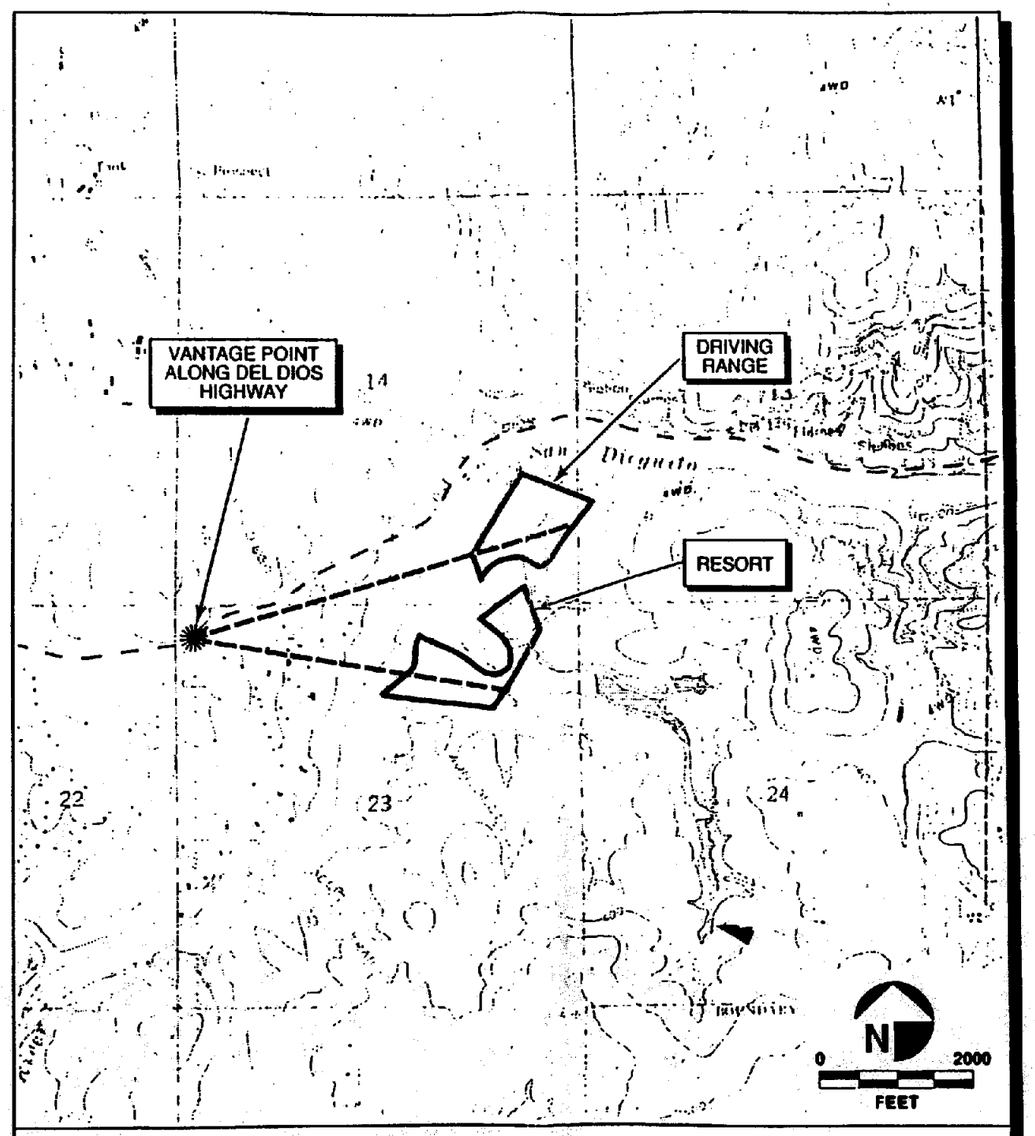
According to the visual sensitivity categories shown in Figure 4.4-12, frequency of views of the northern edge of the tentative map along the San Dieguito River Valley is moderate to high from both Del Dios Highway and the San Dieguito River Valley. The tentative map proposes development of medium density residential housing, a bridge, portions of an 18-hole golf course, a clubhouse, a resort, and a driving range in this area.

Views of the clubhouse from Del Dios Highway would be screened by interviewing vegetation and screened to a lesser extent by interviewing topography. Siting, design/aesthetics, and landscape design would help the facility to blend into the surrounding viewscape. Figures 4.4-17 through 4.4-21 illustrate this concept. As shown in Figures 4.4-17 and 4.4-18, views of the clubhouse from Del Dios Highway would be obscured by intervening vegetation with the exception of the upper portions of the structure. As shown in Figure 4.4-12, the clubhouse site has medium visual sensitivity. Figure 4.4-19 illustrates east and west elevations of the proposed clubhouse and also gives a general indication of design/architectural treatments. Figure 4.4-20 is a site plan for the proposed clubhouse and its parking lot. Proposed landscaping for the clubhouse and parking lot would also help to screen views of structures and paved areas.

Figure 4.4-17 illustrates that a portion of the proposed driving range would be obscured by intervening vegetation in the San Dieguito River Valley. However, the majority of the driving range would be visible from Del Dios Highway. The turf vegetation on the driving range would contrast sharply with the drier native vegetation in the Open Space I areas (especially during the summer and fall); however, it would be compatible with other proposed land uses (i.e., golf course fairways and residential development). Proposed







Cross Section Location Map

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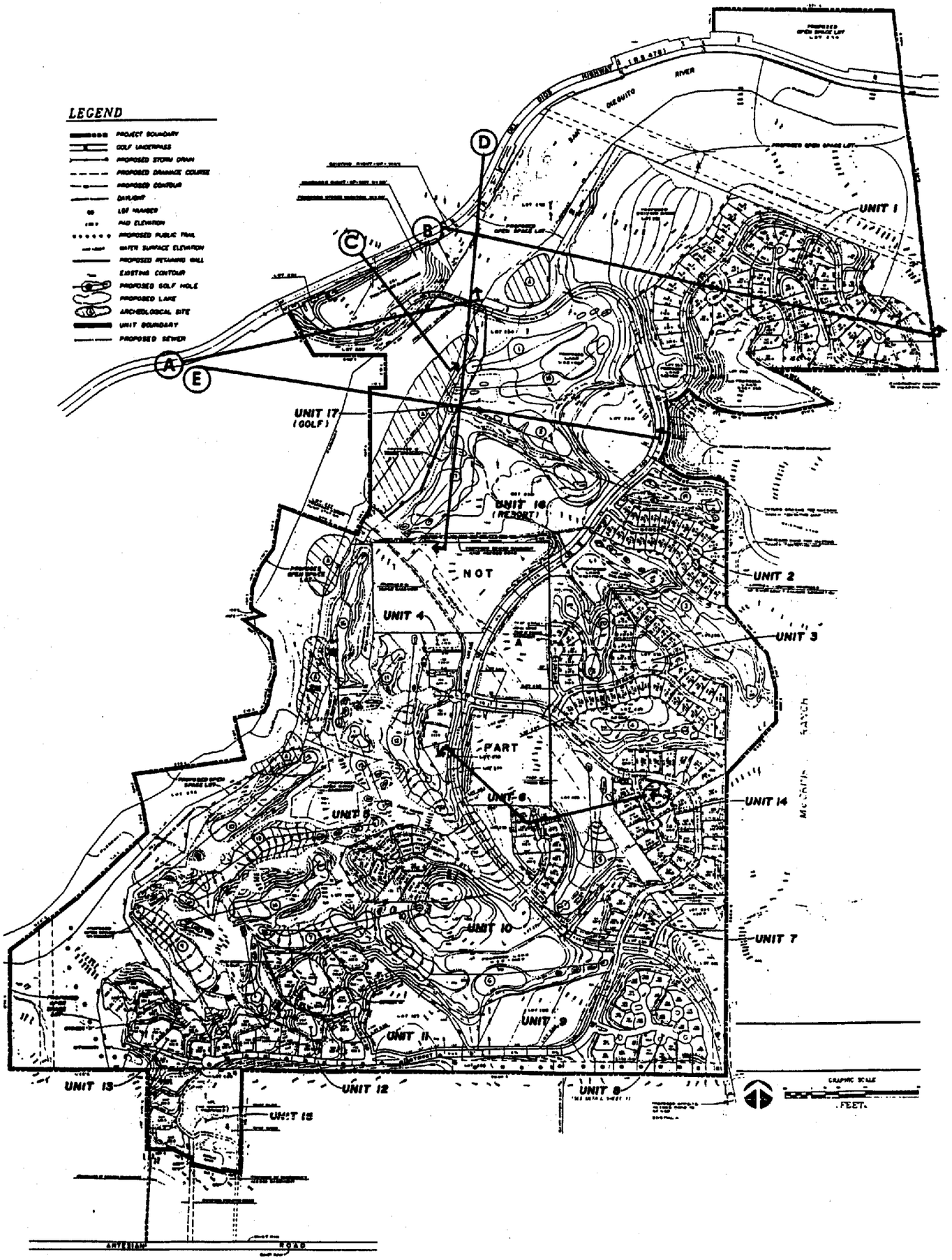
Cross Section of Views to Resort and Driving Range

FIGURE 4.4-15

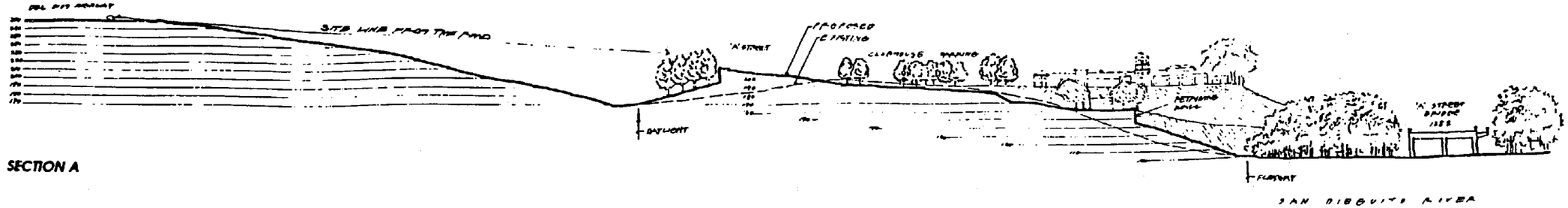


SOURCE: FORMA

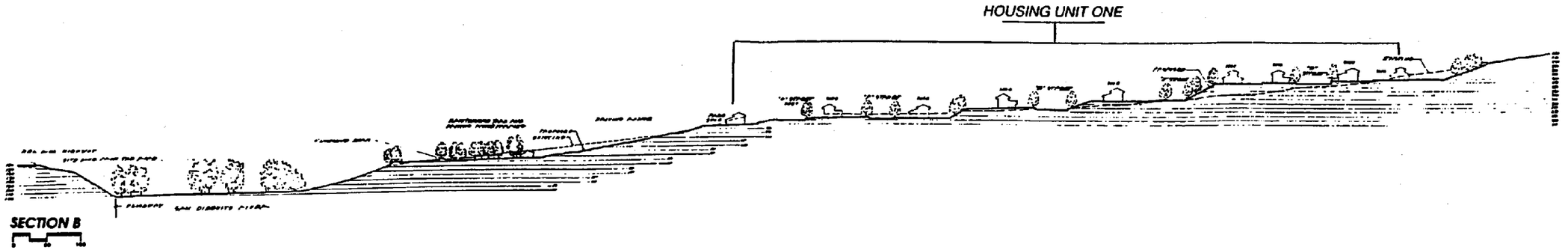
OGDEN

Cross Section Key Map for Balcor Tentative Map Proposal

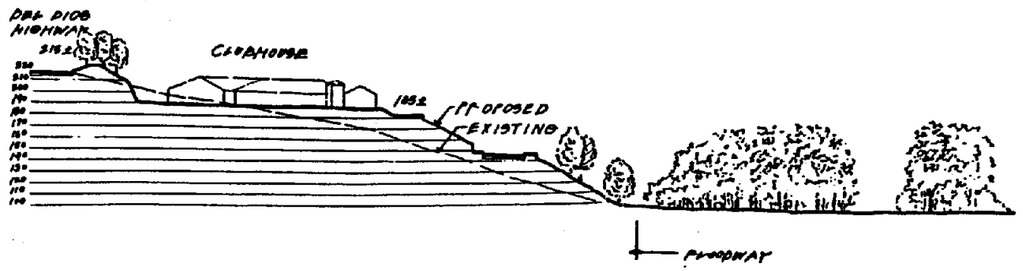
FIGURE 4.4-16



SECTION A



SECTION B



SECTION C

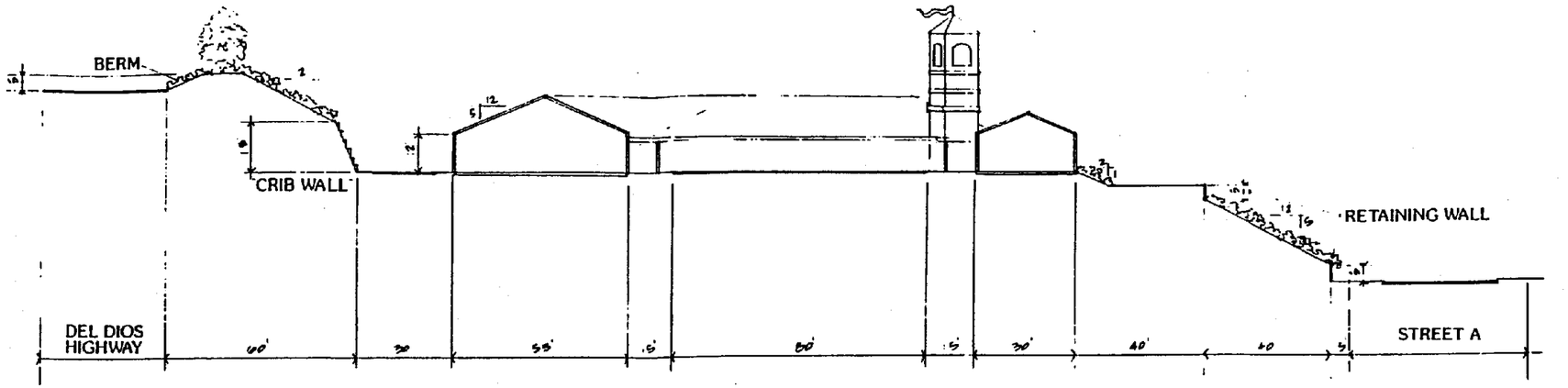
SOURCE: FORMA

REFER TO FIGURE 4.4-17, KEY MAP

OGDEN

Cross Section A, B, and C Showing Site from Del Dios Highway to the Clubhouse, Bridge, and Driving Range

FIGURE 4.4-17



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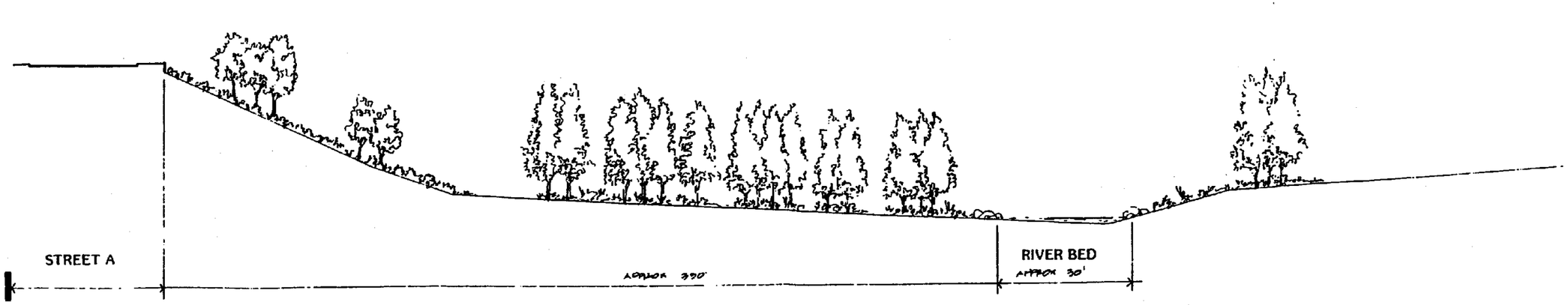
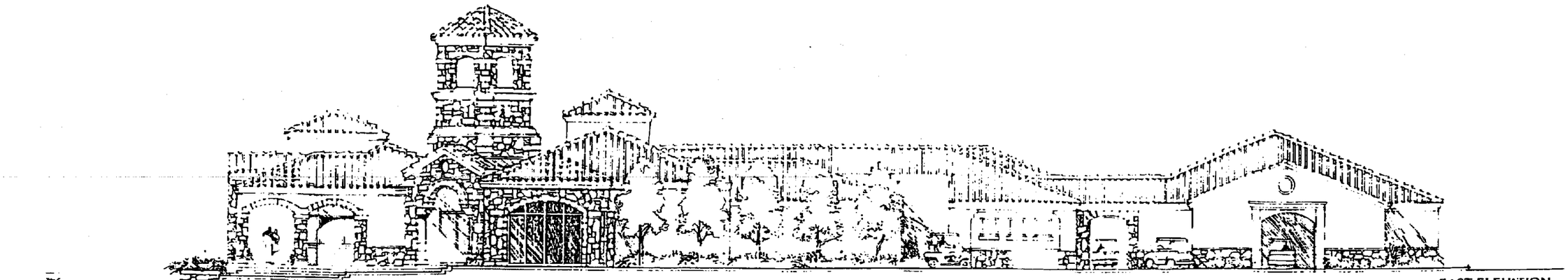


SOURCE: DAHLIN GROUP ARCHITECTS · PLANNERS

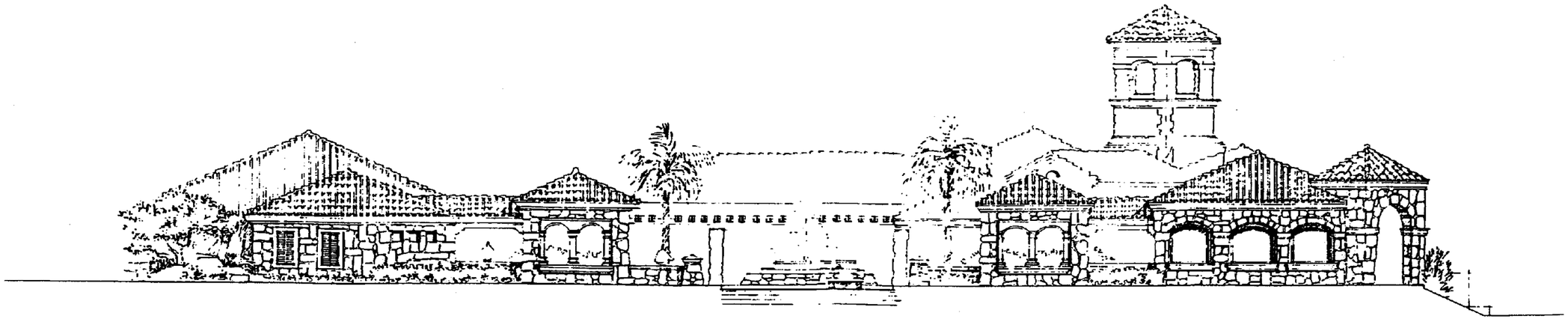
OGDEN

Clubhouse Elevation in Relation to Del Dios Highway and San Dieguito River Valley

FIGURE 4.4-18



EAST ELEVATION
CLUBHOUSE



WEST ELEVATION
CLUBHOUSE

NO SCALE

SOURCE: DAHLIN GROUP ARCHITECTS · PLANNERS

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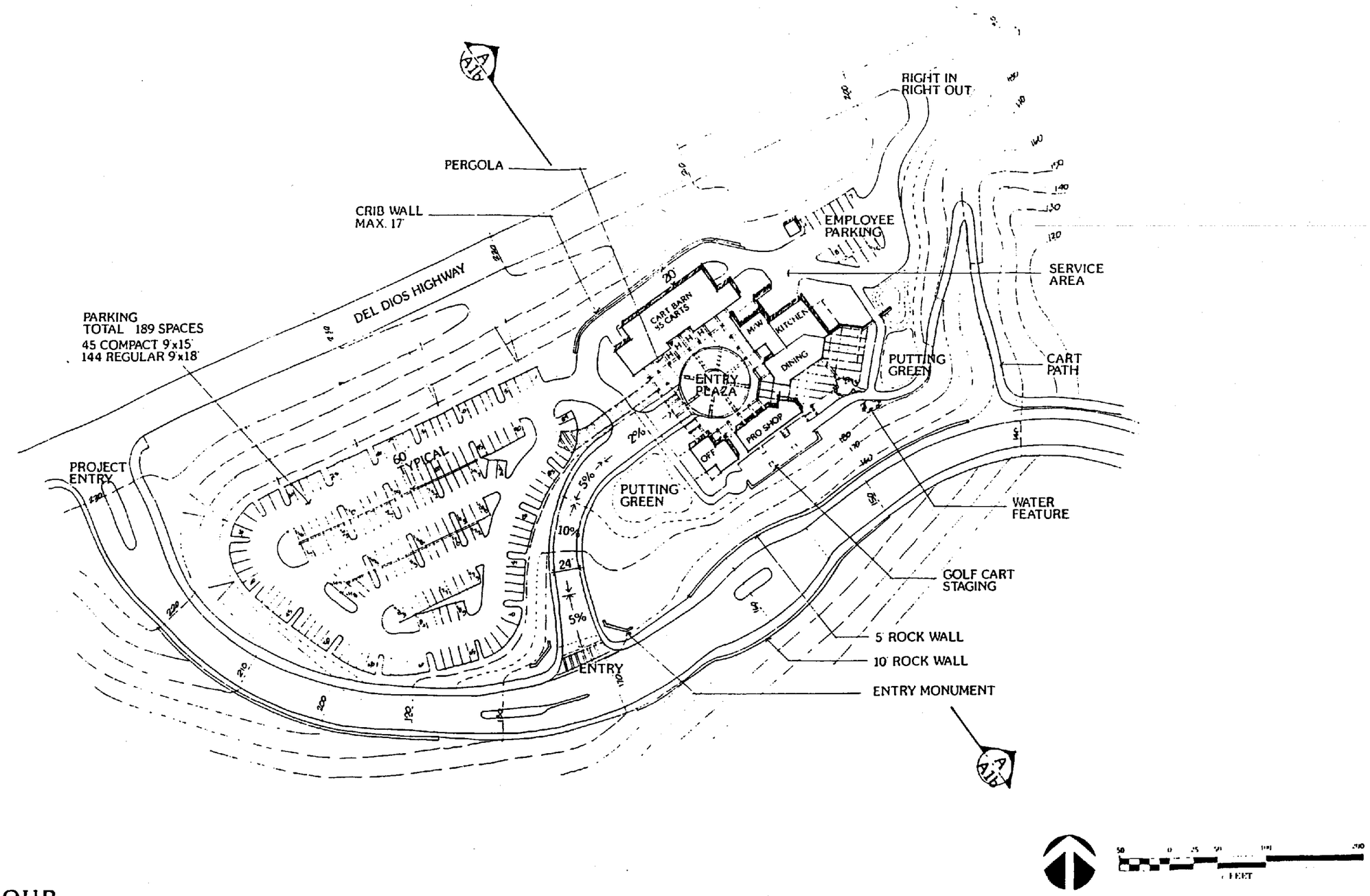
East and West Clubhouse Elevations

FIGURE 4.4-19

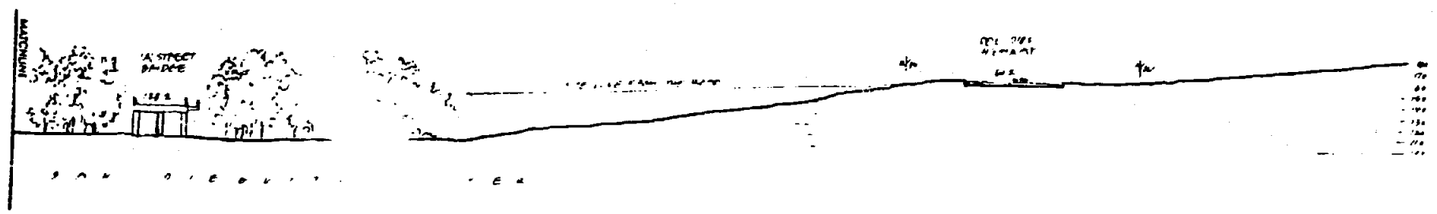


SOURCE: DAHLIN GROUP ARCHITECTS · PLANNERS

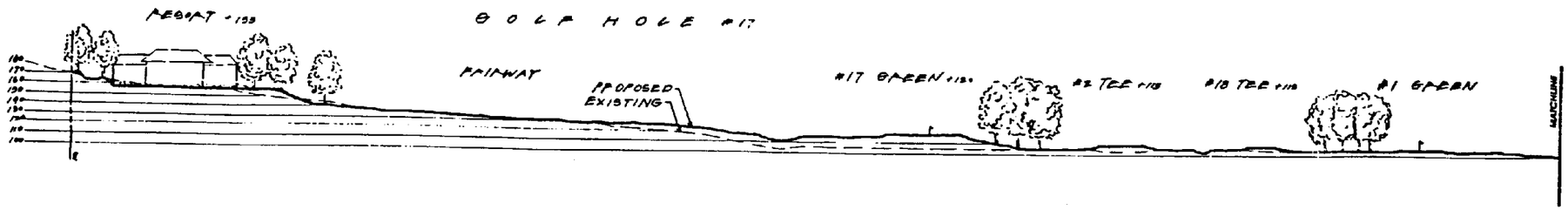
OGDEN

Clubhouse Site Plan

FIGURE 4.4-20



SECTION D



SECTION D

REFER TO FIGURE 4.4-17, KEY MAP

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SOURCE: FORMA

OGDEN

Cross Section D Showing Site Lines from Del Dios Highway to Bridge and Resort

FIGURE 4.4

landscaping for the driving range parking area would soften the effects of a large paved surface. The driving range would be located in an area having medium visual sensitivity (refer to Figure 4.4-12).

The residential development proposed above and to the east (i.e., Unit 1) of the driving range would be highly visible from Del Dios Highway, as shown in Figure 4.4-17. This area has high visual sensitivity as shown in Figure 4.4-12.

Figures 4.4-17 (Section A) and 4.4-21 indicate that the proposed bridge would generally not be visible from Del Dios Highway as intervening vegetation would conceal the structure. The bridge would be visible, however, for short durations to hikers moving through the future River Park.

Figures 4.4-21 and 4.4-22 illustrate the visibility of the proposed resort from Del Dios Highway. Figure 4.4-23 is a site plan for the proposed resort. The resort would be partially obscured from views from Del Dios Highway by intervening vegetation. However, most of the resort would be visible and located in an area with medium visual sensitivity and portions of the western extensions of the facility would be located in an area with high visual sensitivity.

The golf course would be comprised of turf and native vegetation, thus helping this development to better blend with existing vegetation as opposed to exclusively turfed landscape. The golf course is a links-style design which minimizes the amount of introduced changes and maximizes the use of native vegetation and existing topography. Native landscaping is proposed in non-turf areas.

The southern portion of the tentative map area site is also visible to the adjacent Santa Fe Hills development. Development adjacent to Santa Fe Hills would be subject to the "D1" or "D3" designator(s). The project proposes low, medium, and high residential development, and a portion of the golf course, with a maintenance building, within the viewshed of the Santa Fe Hills development. Views from this vantage point have low viewer quantity but high view duration. Figure 4.4-24 illustrates proposed design/architectural treatments for the maintenance building. Compliance with applicable "D" designators would reduce significant impacts to viewshed from adjacent Santa Fe Hills.

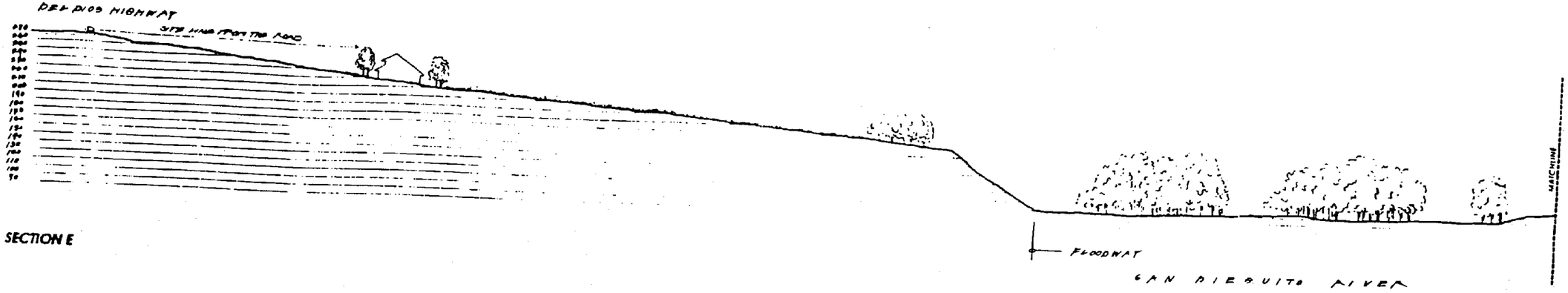
Policy Consistency and Conformance

The Balcor Tentative Map proposes land uses allowed under the proposed Santa Fe Valley Specific Plan. The policy consistency analysis presented in Section 4.4.2 for the Specific Plan applies to the Balcor Tentative Map and is summarized here.

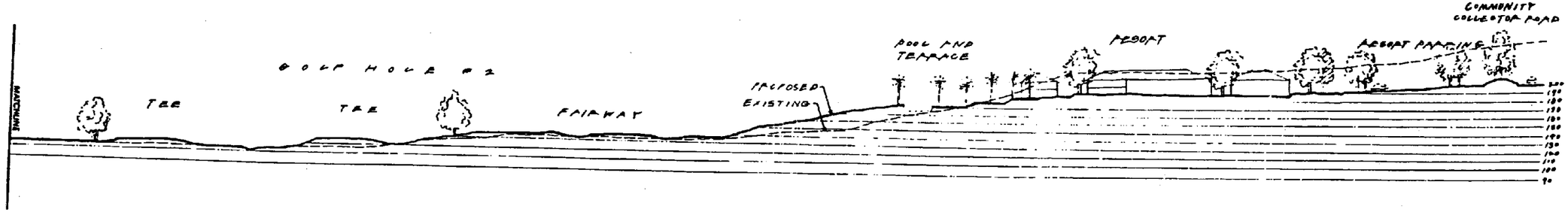
The Balcor Tentative Map is consistent with the applicable visual resource goals and policies set forth in the Land Use, Scenic Highway, and Open Space Elements of the County's General Plan (i.e., Land Use Element Goals 2.6 and 3.1; Open Space Element goals emphasizing preservation recreational opportunities, significant natural features, flood plains, and scenic open space corridors; and Scenic Highway Element goals to protect scenic resources along designated roadways). The Balcor Tentative Map is also consistent with goals stated in the San Dieguito Community Plan to protect visual resources. The Balcor Tentative Map would accomplish this through preservation of open space along the San Dieguito River, preservation of other visually sensitive resources, and compliance with applicable aspects of the "D" designator.

The Balcor Tentative Map subdivision proposal would not be in compliance with the visual policy goals contained in the San Dieguito River Park Concept Plan which address minimization of landform alteration, with special attention to canyons, and steep slopes; and the preservation of the character and visual integrity of the open space corridor. The County of San Diego, however, has not adopted the River Park Concept Plan. The tentative map proposes development in areas with steep slopes which are visible from the San Dieguito River Valley.

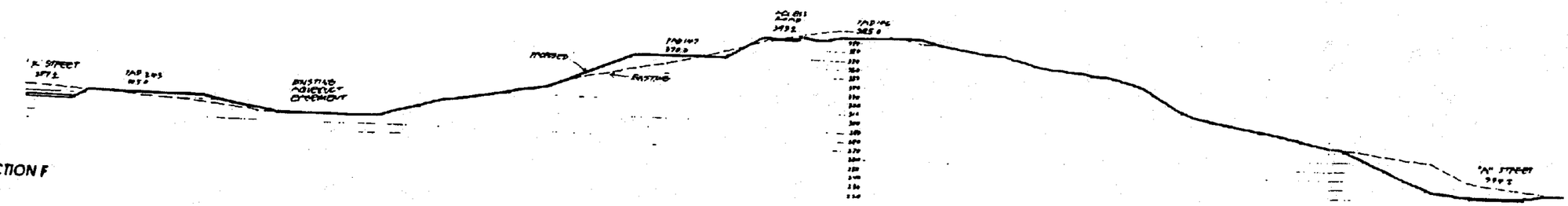
Development in this area would conflict with County of San Diego Guidelines for the implementation of CEQA which indicate that visual/aesthetic issues are potentially significant if the site contains steep slopes greater than 25 percent, the project site is adjacent to an identified scenic highway (Del Dios Highway), or the project proposes cut/fill slopes that exceed 15 feet in height. Development would occur in limited areas on steep slopes. The project would have significant visual impacts within the viewshed of a scenic highway. Also, the project proposes numerous cut/fill slopes substantially higher than 15 feet. Therefore, the project would have significant policy-related visual impacts.



SECTION E



SECTION E



SECTION F

SOURCE: FORMA

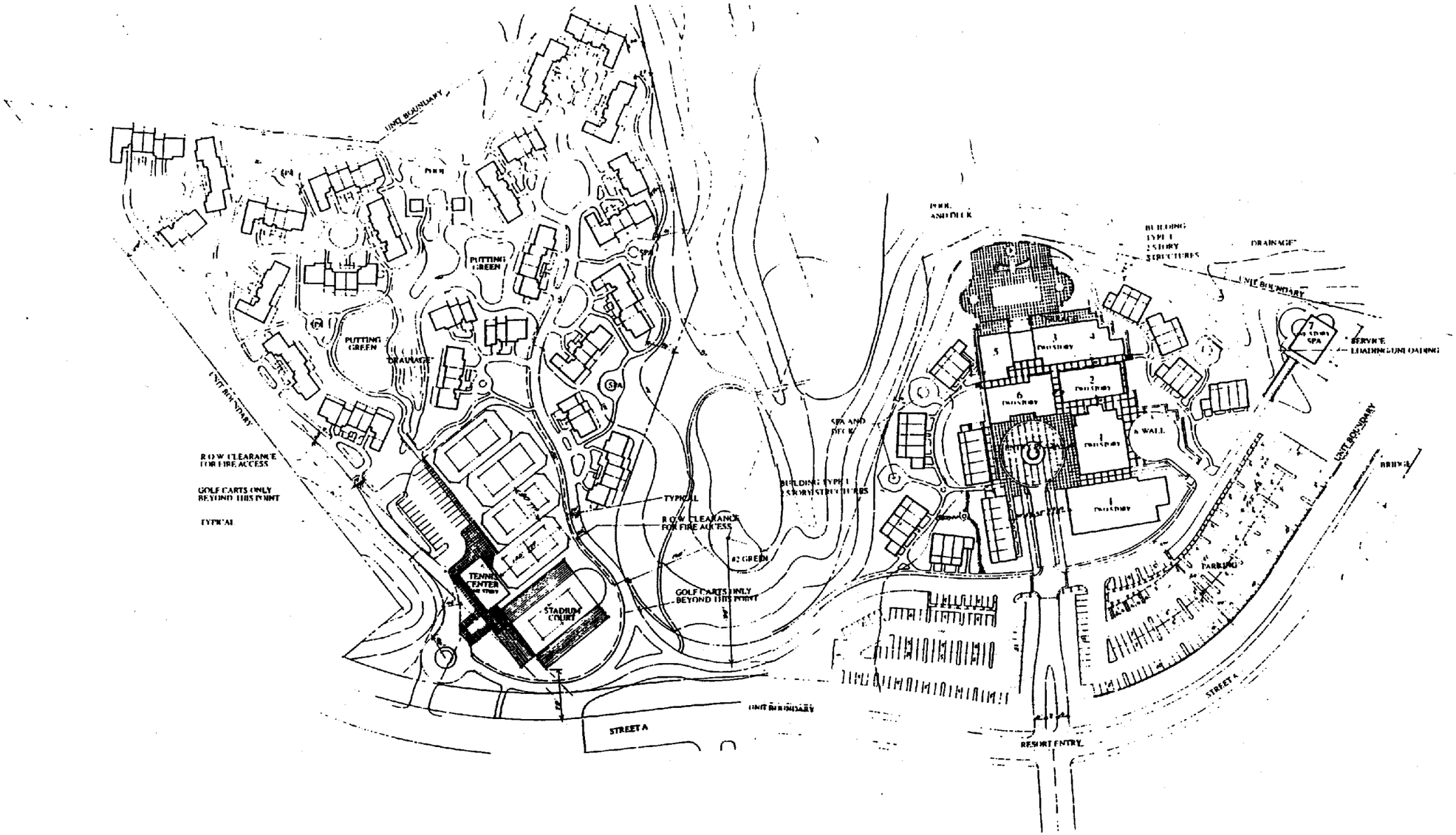
REFER TO FIGURE 4.4-17, KEY MAP

FEET

OGDEN

Cross Section E and F Showing Site Lines from Del Dios Highway to Golf Course and Resort

FIGURE 4.4-22

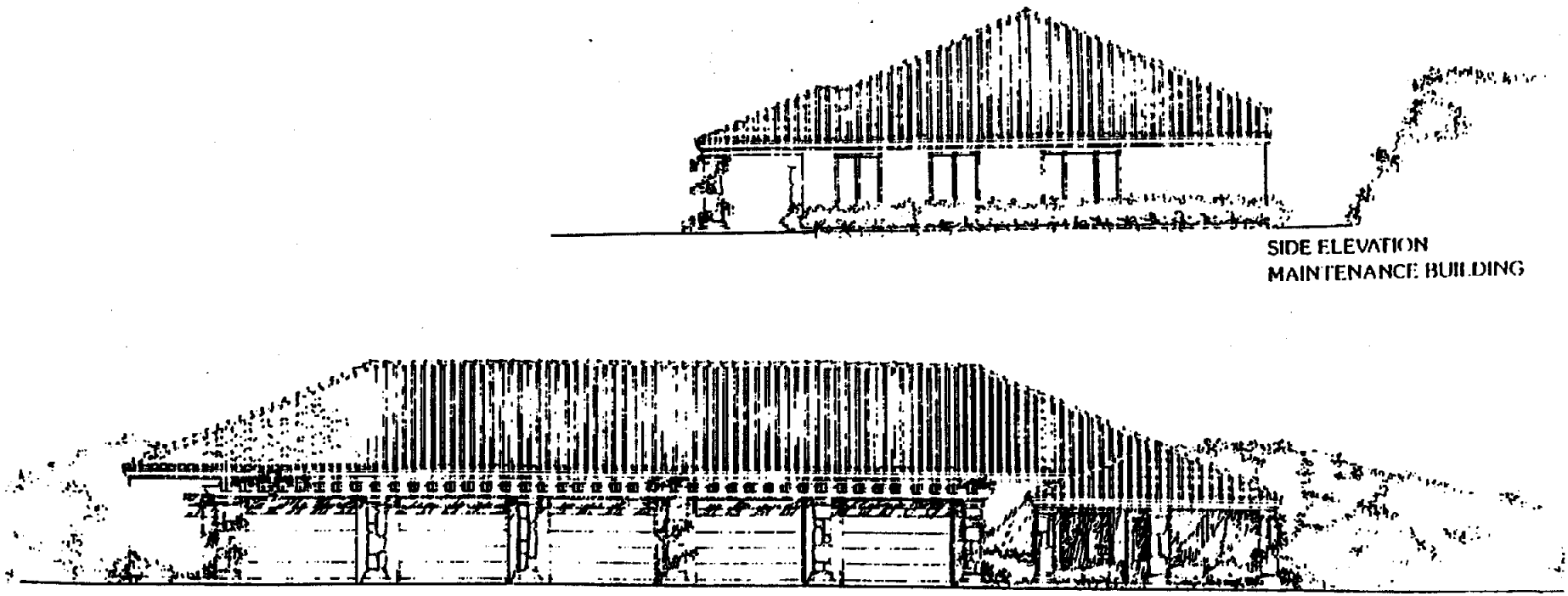


SOURCE: DAHLIN GROUP
ARCHITECTS · PLANNERS

UGDEN

Resort Site Plan

FIGURE
4.4-23



SIDE ELEVATION
MAINTENANCE BUILDING

FRONT ELEVATION
MAINTENANCE BUILDING

NO SCALE

SOURCE: DAHLIN GROUP ARCHITECTS · PLANNERS

OGDEN

Maintenance Building Elevation

FIGURE
4.4-24

Balcor Subdivision Level of Significance

Many areas within viewsheds associated with the Balcor Tentative Map are characterized as having high visual and landform quality and are highly sensitive to change. Development in the tentative map area as proposed would result in physical changes to the onsite undeveloped setting of the project area. In many areas the degree of contrast would be substantial. However, the visual character of the overall project vicinity resembles an urbanizing Estate Development Area as described in the Community Character section of the San Dieguito Community Plan. The Balcor Tentative Map proposal would introduce a similar type of development. Therefore, while site-specific visual impacts to natural open space areas would be significant, substantial overall changes to visual aspects of community character would not occur.

Landform alteration impacts would result from the introduction of man-made structures and infrastructure, cut/fill slopes, soil excavation, and substantial amounts of mass grading. Landform alteration impacts within the tentative map area and impacts to other visual resources would be visible to large numbers of motorists traveling along Del Dios Highway. Landform alteration and viewer quantity/visibility impacts would be significant.

Impacts resulting from noncompliance with adopted visual policy would be significant. Policy-related visual impacts would be reduced by the proposed mitigation measures by rendering the proposed development more compatible with the intent of applicable visual resource policy discussed in Section 4.4.1.

With the implementation of mitigation measures in Section 4.4.4, all impacts to visual quality resources will be mitigated.

Balcor Subdivision Mitigation

The mitigation measures proposed for the overall Specific Plan would be applicable to the Balcor Tentative Map subdivision. No other mitigation measures are required.

Seaton Subdivision Tentative Map Impacts

The Seaton Tentative Map area is located in the center of the Balcor Subdivision. The Seaton subdivision proposes development of a small low density residential area. The

Seaton Tentative Map is a 41-acre parcel map consisting of four lots and one private road easement.

Change to the Overall Visual Character of the Project Area

The existing visual character of the Seaton Tentative Map area (i.e.. four lots and one private road easement) would be altered by the proposed construction of residential housing and roads. However. the project would not substantially change the existing overall visual character of the tentative map area from that of a primarily vacant/undeveloped natural area. The tentative map only proposes four clustered lots which would comprise approximately 5 acres of introduced urban development (i.e., 12 percent) over the 41-acre area. This change would not dramatically alter the site's overall appearance and is not therefore considered significantly adverse.

Alteration of Significant or Sensitive Landforms

Large cut/fill slopes would be created in order to accommodate the proposed residential development (i.e., four lots). Residential development of four lots in the southern portion of the tentative map area (refer to Figure 3-10) would result in a fill slope reaching approximately 40 feet in height with a maximum horizontal depth of 100 feet. An adjacent cut slope would reach approximately up to 20 feet vertical distance over 50 feet horizontal distance. These are the only large cut/fill slopes proposed by the tentative map. The southern portion of the tentative map area that contains slopes in excess of 25 percent gradient would remain as open space. Grading quantities associated with the Seaton Tentative Map would total 60,000 cubic yards of balanced cut/fill. A total of 60,000 cubic yards of grading over a 41-acre site consisting of 4 lots is considered a significant impact. However, compliance with the Community Design Guidelines proposed by the Specific Plan would minimize potential grading and landform alteration impacts through specialized grading techniques.

Visual Impacts in Areas Visible to a Large Number of People

The Seaton Tentative Map area is visible to a large number of viewers from several different areas. As shown in Figures 4.4-10 and 4.4-11, approximately 85 percent of the tentative map area is visible from the San Dieguito River Valley, and approximately 95 percent of the subdivision area is visible from Del Dios Highway. The four lots and the

road easement would be completely visible from Del Dios Highway and the San Dieguito River Valley, and are within areas of medium sensitivity and a small area of high sensitivity. However, since the overall tentative map area would not create substantial changes to visual character or landform alteration, views of the site would not be significantly impacted.

Policy Consistency and Conformance

The Seaton Tentative Map proposes land uses allowed under the proposed Santa Fe Valley Specific Plan. The policy consistency analysis presented in Section 4.4.2 for the Specific Plan applies to the Seaton tentative map and is summarized here.

Through its open space conservation and compliance with the "D" designator, the Seaton tentative map proposal would be in compliance with the visual policy goals contained in the San Dieguito River Park Concept Plan which address minimization of landform alteration and the preservation of the character and visual integrity of the open space corridor. However, the County of San Diego has not adopted the Concept Plan. Upon required compliance with the Specific Plan's Community Design Guidelines which set forth specialized grading techniques and other measures which protect visual resources, development in this area would not conflict with applicable visual/aesthetic resource policies contained in the County of San Diego Guidelines for the implementation of CEQA, or applicable goals and policies contained in the San Dieguito Community Plan.

Seaton Subdivision Level of Significance

No significant impacts to the site's visual character, or views would occur, and no policy-related inconsistencies would result.

Impacts from landform alteration would be significant and would include the introduction of two large manufactured slopes. However, these slopes could be screened with landscaping and the visual effects of the slopes could be reduced using specialized grading techniques.

With the implementation of mitigation measures in Section 4.4.4, all impacts to visual quality resources will be mitigated.

Seaton Subdivision Mitigation

No significant impacts to visual character or view were identified. No inconsistencies with visual policy were identified. Therefore, no mitigation measures for these issues are required. The Seaton proposal would result in significant landform alteration impacts. Mitigation measures proposed for the SPA would be applicable to the Seaton Tentative Map proposal. Further, development of the Seaton subdivision would be subject to applicable regulations and guidelines contained in the County's zoning ordinance, the Specific Plan's Community Design Guidelines, or other relevant policy.

McCrink Ranch Subdivision Tentative Map Impacts

The McCrink Ranch subdivision proposes development of an 9-hole golf course, water storage facilities, roads, and low, medium, and high density residential areas. Development would generally occur in the southern portion of the tentative map area. These areas are not visually sensitive (refer to Figure 4.4-12)

Change to the Overall Visual Character of the Project Area

Certain areas of natural open space and sensitive landforms would be altered by the McCrink Ranch subdivision's proposed construction (e.g., the undeveloped knolls in the southwestern portion of the tentative map and the undeveloped area in the north-central portion of the tentative map near the San Dieguito River). Approximately 273 acres of the total 744 acres comprising the tentative map would be dedicated to permanent open space. The area left undisturbed would primarily be in the northern section of the tentative map area, on both sides of the San Dieguito River Valley and Del Dios Highway.

The project would change the existing undeveloped visual character of the tentative map area from that of primarily vacant/undeveloped natural and agricultural areas to an urbanized area. Visual quality in certain areas would be disrupted and the site's moderate sensitivity to change would be made apparent by the introduction of moderate to intensive urban development. This change would alter certain areas of the site's open space/rural appearance and is considered a significant impact. However, most of the areas proposed for development are not visible from Del Dios Highway or from the San Dieguito River Valley. Since the project proposes a similar type of development to the surrounding area consistent with the San Dieguito Community Plan, substantial overall changes to visual

aspects of community character would not occur. Site-specific visual impacts to natural open space areas as a result of the proposed development would be significant. but mitigable. Therefore. significant impacts to the overall visual character of the area would not occur.

The effect of increased light and glare as a result of night lighting is considered adverse. but not significant. The project would have to comply with the County's Dark Sky Ordinance.

Alteration of Significant or Sensitive Landforms

Large cut/fill slopes would be created in order to accommodate the proposed residential development and golf facilities. Residential development in the central portion of the tentative map area would result in fill slopes up to 50 feet vertical distance over 110 feet horizontal distance. Residential development in the southwestern portion of the tentative map would result in cut slopes up to 60 feet vertical distance over 100 feet horizontal distance. and fill slopes up to 25 feet vertical distance over 80 feet horizontal distance. Manufactured slopes required to re-contour areas for the proposed golf course would result in slopes up to 60 feet in height with a maximum of approximately 200 feet in horizontal distance.

Grading quantities associated with the McCrink Tentative Map would be substantial. Development of the tentative map proposal would require approximately 1,650,000 cubic yards of balanced cut/fill. Therefore. landform alteration impacts would be significant. but mitigable.

Visual Impacts in Areas Visible to a Large Number of People

Certain areas of the McCrink Ranch Tentative Map area are visible to a large number of viewers from several different areas. As shown in Figures 4.4-10 and 4.4-11. a portion of the developed area within the tentative map is visible from the San Dieguito River Valley. and from Del Dios Highway. The proposed medium density residential uses (i.e., Unit 1), and portions of the golf course are within the short range viewshed of Del Dios Highway and from along the San Dieguito River Valley. The landform alteration associated with visible development and other visual resource effects within the tentative map would result in significant visual resource impacts.

According to the visual sensitivity analysis presented in Figure 4.4-12, sensitivity of views of development in the northern end of the tentative map from both Del Dios Highway and the San Dieguito River Valley would be moderate to high. Most of the acreage in the northern portion of the tentative map would be preserved under the Open Space I designation.

Policy Consistency and Conformance

The McCrink Ranch tentative Map proposes land uses allowed under the proposed Santa Fe Valley Specific Plan. The policy consistency analysis presented in Section 4.4.2 for the Specific Plan applies to the McCrink Ranch Tentative Map and is summarized here.

The McCrink Ranch Tentative Map subdivision proposal would not be in compliance with the visual policy goals contained in the San Dieguito River Park Concept Plan which address minimization of landform alteration, with special attention to steep slopes; and the preservation of the character and visual integrity of the open space corridor. However, the County of San Diego has not adopted the River Park Concept Plan. The tentative map proposes development in areas with steep slopes which are highly visible from the San Dieguito River. Development associated with project implementation would permanently change the overall undeveloped natural open space character of the park corridor.

Development in this area would conflict with County of San Diego Guidelines for the implementation of CEQA which indicate that visual/aesthetic issues are potentially significant if the site contains steep slopes greater than 25 percent, the project site or surrounding area has existing open space easements to protect visual resources, the project site is adjacent to an identified scenic highway, or the project proposes cut/fill slopes that exceed 15 feet in height. Additionally, physical changes would substantially affect the viewshed of a designated scenic highway (Del Dios Highway).

McCrink Ranch Subdivision Level of Significance

Many areas within the Del Dios Highway/San Dieguito River Valley viewsheds are characterized as having high visual and landform quality and are sensitive to change. Physical changes in this landscape will degrade the quality of certain unique topographical features, undisturbed native vegetation, natural open space, and the future river park. Therefore, development as proposed by the McCrink Ranch Tentative Map would result in

physical changes to the undeveloped portions of the area. However, the visual character of the overall project vicinity resembles an urbanizing Estate Development Area as described in the Community Character section of the San Dieguito Community Plan. The Balcor Tentative Map proposal would introduce a similar type of development. Therefore, while site-specific visual impacts to natural open space areas would be significant, substantial overall changes to visual aspects of community character would not occur.

Landform alteration impacts would be the result of the introduction of man-made structures/infrastructure, cut/fill slopes, soil excavation, and substantial amounts of mass grading. Therefore, landform alteration impacts would be significant.

Landform alteration impacts and other impacts to visual resources within the tentative map area would be visible to large numbers of motorists traveling along Del Dios Highway. In many areas the degree of contrast would be substantial. Therefore, impacts to views of visual resources would be significant.

Physical changes are in conflict with applicable visual resource protection policy. Impacts resulting from noncompliance with adopted visual policy would be significant. Policy-related visual impacts would be reduced by the proposed mitigation measures by rendering the proposed development more compatible with the intent of such policy, (e.g., compliance with "D" designator).

With the implementation of mitigation measures in Section 4.4.4, all impacts to visual quality resources will be mitigated.

McCrink Ranch Subdivision Mitigation

The mitigation measures proposed for the overall Specific Plan would be applicable to the McCrink Ranch Tentative Map subdivision. No other mitigation measures are required.

Bernardo Lakes Subdivision Tentative Map Impacts

The Bernardo Lakes Tentative Map subdivision area includes large areas of relatively level terrain. This area is not generally visible from the San Dieguito River Valley or from Del Dios Highway (refer to Figures 4.4-11 and 4.4-12). There are a few newer homes built into the slopes at the north edge of the mesa, and some of the other areas within the

tentative map have been disturbed by vegetation clearing and the erection of numerous fence lines. The tentative map proposes development of low and medium density residential development. A water storage site, park, and an elementary school are also proposed for development.

Change to the Overall Visual Character of the Project Area

The existing visual character of the Bernardo Lakes subdivision site would be slightly altered by the proposed construction of low and medium residential housing, roads, and water retention basin since the area would become more intensely developed. However, the project would not substantially change the existing overall visual character of the tentative map area from that of a somewhat developed rural area with scattered residences within vacant but largely disturbed open space. The overall visual character of the tentative map area as well as the surrounding area would not be changed by the introduction of a similar type of land use. Visually sensitive biological resources and sensitive landforms would be preserved in Open Space I.

The tentative map proposes clustered residential development which would comprise approximately 116 acres of introduced urban development (i.e., 52 percent) over the 226-acre area. Approximately 48 percent of the area would remain as natural open space with an additional 15 acres used as park land. Changes to the sites overall visual character resulting from the Bernardo Lakes subdivision not would adversely alter the site's overall appearance and are not, therefore, considered significant.

Alteration of Significant or Sensitive Landforms

A small area in the northwestern portion of the tentative map features steep slopes that would remain as open space. A small riparian corridor traverses the site from the northwest to southeast which would also be preserved as natural open space. However, a few large cut/fill slopes would be created in other areas in order to accommodate the proposed residential development. Residential development in the southern portion of the tentative map area would result a small number of cut/fill slopes reaching approximately 25 feet high and having a maximum horizontal depth of 50 feet. The size of proposed cut slopes to accommodate the water retention reservoir would reach approximately up to 40 feet vertical distance over 200 feet horizontal distance. Grading quantities associated with the Bernardo Lakes Tentative Map would total 430,000 cubic yards of balanced cut/fill.

The Community Design Guidelines proposed by the Specific Plan would minimize potential grading impacts of subject development through specialized grading techniques. Landform alteration associated with this tentative map would not, however, be visible to sensitive receptors traveling along Del Dios Highway or from the San Dieguito River Valley. Therefore, landform alteration impacts are not considered significant.

Visual Impacts in Areas Visible to a Large Number of People

Views of the Bernardo Lakes Tentative Map area are very limited to sensitive receptors. As shown in Figures 4.4-11 and 4.4-12, only a small area in the northern portion of the site is visible from the San Dieguito River Valley and from Del Dios Highway. No development is proposed in this area. Areas proposed for residential development, roads, and the water storage reservoir would be completely screened by intervening topography from Del Dios Highway and the San Dieguito River Valley. Areas proposed for development would be visible from offsite vantage points to the south of the tentative map area. However, proposed development in these areas would be the same land use type (i.e., compatible) as development proposed by the Bernardo Lakes tentative map. Therefore, since the overall tentative map areas would not create substantial adverse changes to visual character and landform alteration would not be visible to sensitive receptors, views of the site would not be significantly impacted.

Policy Consistency and Conformance

The Bernardo Lakes Tentative Map subdivision proposal would not conflict with the visual policy goals contained in the San Dieguito River Park Concept Plan because the tentative map area is not within the future park's FPA, nor are areas proposed for development visible from the San Dieguito River Valley. Upon compliance with the Specific Plan's Community Design Guidelines, development in this area would not conflict with the intent of applicable visual/aesthetic resource policy contained in the County of San Diego Guidelines for the implementation of CEQA, or applicable goals and policies contained in the San Dieguito Community Plan.

Bernardo Lakes Subdivision Level of Significance

The tentative map proposal would not substantially degrade the area, conflict with the area's character, or effect the viewshed of a designated scenic highway. Impacts to visual

resources associated with sensitive receptors along Del Dios Highway and the San Dieguito River would not be significant. Effects from landform alteration (large cut/fill slopes) and grading would not be visible to viewers along Del Dios Highway or the San Dieguito River Valley. Therefore, no significant visual policy impacts are identified.

Bernardo Lakes Subdivision Mitigation

No significant visual impacts were identified. Therefore, no mitigation measures are necessary.

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4.5 TRAFFIC/CIRCULATION

4.5.1 Existing Conditions

The following section is based on the draft Circulation Element for the Santa Fe Valley Specific Plan and a Traffic Technical Report prepared by Kimley-Horn and Associates. Inc., which is included in this EIR as Appendix E (separately bound: available at the County of San Diego, Department of Planning and Land Use).

Circulation System

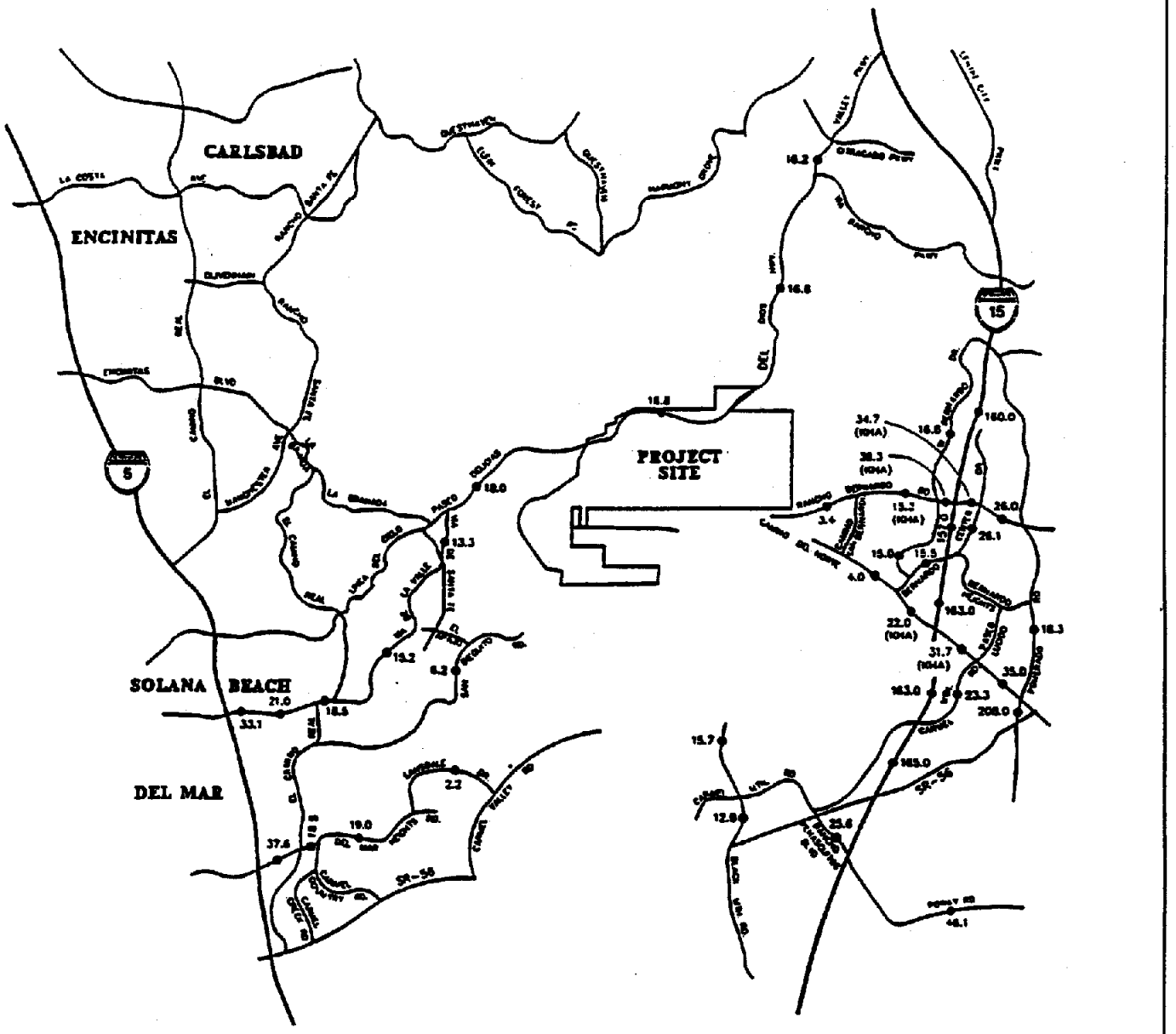
Direct access to the site is currently from the west and east of the project site via Del Dios Highway (Figure 4.5-1). Del Dios Highway parallels the San Dieguito River for about two miles downstream from the dam at Lake Hodges. The Highway runs primarily in a south/west direction, serving as a connector from Interstate 5 (I-5) to Interstate 15 (I-15). Regional access is provided by I-5 and I-15 which are the major north/south routes in the project area.

The characteristics of the existing roadway network and an evaluation of the existing traffic conditions are discussed below. The roadways that serve the Santa Fe Valley vicinity are located both within the County of San Diego and the City of San Diego; therefore, the discussion of roadway characteristics and existing traffic conditions include both jurisdictions.

Roadway Characteristics

The following roadways exist in the vicinity of the SPA.

Interstate 15 (I-15) is an eight-lane north-south freeway which extends from its junction with I-5 on the south, through San Diego County, into Riverside County and north towards San Bernardino. A reversible two-lane roadway in the median of I-15 from Highway 56 to Highway 163 is allocated to the exclusive use of High Occupancy Vehicles (HOVs), such as buses, carpools, and vanpools. In 1994, the average weekday traffic on I-15 at Camino del Norte was about 175,000.



NOTE:
VOLUMES IN THOUSANDS
ALL VOLUMES ARE 1992 OR MOST RECENT (UNLESS OTHERWISE NOTED)
(KHA) = KHA FIELD COUNTS 1995
(e) = TWO-WAY VOLUME ESTIMATES

N
NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc., June 1995

OGDEN

Existing ADT Volumes

FIGURE
4.5-1

Bernardo Center Drive is a north-south. four-lane major arterial which runs from 1.500 feet south of Camino del Norte to north of West Bernardo Drive. The roadway is currently built to its ultimate classification: and the I-15/Bernardo Center Drive interchange is built to its ultimate configuration.

Black Mountain Road is a four-lane major arterial from approximately the northern boundary of the Rancho Peñasquitos community in the City of San Diego, south to Miramar Road in the Mira Mesa community of the City of San Diego. The roadway is planned to be extended north to the future Carmel Valley Road in the City of San Diego's North City Future Urbanizing Area.

Camino del Norte is an east-west, six-lane primary arterial which extends from Pomerado Road in the City of Poway to west of Camino San Bernardo in the Rancho Bernardo Community of the City of San Diego. The roadway is planned to be extended to future Camino Ruiz. Camino del Norte is planned to have a grade-separated interchange with Bernardo Center Road.

El Camino del Norte is an east-west two-lane facility that connects Del Dios Highway/Paseo Delicias in the Rancho Santa Fe area with Rancho Santa Fe Road in Encinitas. It is classified as a light collector road in the County's Circulation Element.

Camino San Bernardo is a north-south, four-lane major road which extends from Camino del Norte to Rancho Bernardo Road. The roadway is currently built to its ultimate classification. The primary function of Camino San Bernardo is to serve the 4S Business Park area.

Del Dios Highway is currently a two-lane light collector road which runs from just north of the Via Rancho Parkway in Escondido south and west along the San Dieguito River Valley into Paseo Delicias in the Rancho Santa Fe area. Del Dios Highway is classified in the County's General Plan as a four-lane undivided collector road.

Paseo Delicias is currently a two-lane roadway which connects Del Dios Highway in the Rancho Santa Fe area with the coastal cities of Del Mar, Solana Beach, and Encinitas through connections with Via de la Valle, Linea Del Cielo/Santa Fe Drive, and La Granada/Encinitas Boulevard, respectively.

Rancho Bernardo Road is an east-west, four-lane major arterial which runs from Espola Road in the City of Poway through the Rancho Bernardo Community to its existing westerly terminus in the 4S Ranch Specific Plan Area. A segment of Rancho Bernardo Road is planned to be improved to a six-lane arterial street between West Bernardo Road and Interstate 15.

San Dieguito Road is currently a two-lane collector road which runs from the Fairbanks Ranch community in the County of San Diego, southwest to connect with El Camino Real just south of the San Dieguito River in the City of San Diego. San Dieguito Road serves as the primary access to the Fairbanks Ranch Country Club and the Fairbanks Ranch Estates Residential Development. San Dieguito Road is planned to be extended from its eastern terminus to Camino Ruiz in the Black Mountain Ranch.

Daily Traffic Conditions

The County and City of San Diego have developed standards for approximating the relationship between average daily traffic volume and Level of Service (LOS), for each County of San Diego and City of San Diego street classification, to assist in describing street segment operating conditions. These street segment LOS standards give average daily vehicle trip thresholds corresponding to LOS A through F for various street types. It should be noted that the traffic volume thresholds are intended to provide a qualitative assessment of a roadway segment's average daily operating conditions. Application of these standards is considered a good approximation of typical operating conditions.

Level of Service is a measure of a roadway's operating performance and the motorists' perception of roadway performance. LOS is expressed as a letter designation from A to F, with A representing the best operating conditions, and F the worst. When evaluating daily traffic volumes, the County of San Diego generally considers LOS C an acceptable operating condition in planning future development. The City of San Diego considers LOS D an acceptable operating condition, but in newly developing communities, the goal is to achieve LOS C. LOS C is characterized by stable flow and the point at which maneuverability and speed, and motorist comfort and convenience begin to decline noticeably. LOS D is an unstable flow condition, wherein delays become extensive and the effects of congestion on speed and maneuverability become more noticeable.

To assess daily traffic operating conditions on the key street segments of the Circulation Element roadways in the Santa Fe Valley area, existing daily traffic volumes were compared to either the County's or the City's traffic volume threshold, as applicable. Figure 4.5-1 shows the existing Average Daily Traffic Volumes (ADTs) in the Santa Fe Valley study area and Table 4.5-1a summarizes the existing LOS for key street segments and key freeway segments, respectively. Table 4.5-1b summarizes traffic volumes on the key freeway ramps. Caltrans procedures for determining freeway LOS are based on peak hour lane capacities instead of 24-hour volumes.

Based on existing ADTs and the data presented in Table 4.5-1, the following roadway segments currently exceed the traffic volume thresholds which the County of San Diego and City of San Diego use to define unacceptable levels of service:

- Del Dios Highway between Via Rancho Parkway and Citracado Parkway
- Del Dios Highway between El Camino del Norte and Via Rancho Parkway
- Paseo Delicias between Via de la Valle and El Camino del Norte
- Via de la Valle west of Paseo Delicias
- Via de la Valle between El Camino Real (west) and El Camino Real (east)
- Rancho Bernardo Road between West Bernardo Road and Interstate 15
- Via de la Valle between San Andres Drive and El Camino Real
- I-15 through the study area

I-15 currently constitutes the only continuous north-south travel corridor in the Santa Fe Valley area and, as indicated in Table 4.5-1(b), it is currently congested in both the morning and evening peak hours.

Peak Hour Traffic Conditions

While roadway levels of service based on daily traffic volumes are useful as a general indication of actual traffic conditions, operating conditions at the signalized intersections provide a more definitive measure of roadway capacity. Accordingly, existing peak hour operating conditions were evaluated at nine key intersections in the Santa Fe Valley project area. These intersections are:

Table 4.5-1a

EXISTING ROADWAY SEGMENTS LEVELS OF SERVICE

Roadway Segment	Cross-Section	LOS C Volume[1]	Daily Traffic Volume[2]	LOS[3]
Del Dios Highway:				
El Camino del Norte to Via Rancho Parkway	2-lane Light Collector	7,100	16,800	F*
Via Rancho Parkway to Citracado Parkway	2-lane Light Collector	7,100	16,200	E*
Paseo Delicias:				
La Granada to El Camino del Norte	2-lane Light Collector	7,100	18,000	E*
Via De La Valle:				
I-5 to San Andres Drive	4-lane Major	30,000	33,100	D
San Andres Drive to El Camino Real	2-lane Collector	7,500	21,000	F*
El Camino Real W. to El Camino Real E.	2-lane Collector	7,500	18,500	F*
West of Via de Santa Fe	2-lane Collector	7,100	15,200	E*
East of Via de Santa Fe	2-lane Collector	7,100	13,300	E*
El Camino Del Norte:				
North of Paseo Delicias	2-lane Light Collector	7,100	6,300	C
San Dieguito Road:				
East of El Apajo	2-lane Collector	7,100	2,900	B
El Apajo to Camino Santa Fe	2-lane Collector	7,100	6,200	C
South of Camino Santa Fe	2-lane Collector	7,500	9,400	E*
Camino Del Norte:				
Camino San Bernardo to Bernardo Center Drive	6-lane Prime Arterial	44,600	1,200	A
Bernardo Center Drive to Interstate 15	6-lane Prime Arterial	50,000	22,092	A

Table 4.5-1a (Continued)

EXISTING ROADWAY SEGMENTS LEVELS OF SERVICE

Roadway Segment	Cross-Section	LOS C Volume[1]	Daily Traffic Volume[2]	LOS[3]
Interstate 15 to Carmel Mountain Road	6-lane Prime Arterial	50,000	31,700	B
Carmel Mountain Road to Pomerado Road	6-lane Prime Arterial	50,000	35,000	B
Camino San Bernardo				
Camino del Norte to Rancho Bernardo Rd.	4- lane Major Arterial	29,600	3,000	A
Rancho Bernardo Road:				
West of Camino San Bernardo	4-lane Major	30,000	3,400	A
Camino San Bernardo to W. Bernardo Road	4-lane Major	30,000	15,400	B
W. Bernardo Road to Interstate 15	4-lane Major	30,000	38,300	E*
Interstate 15 to Bernardo Center Drive	4-lane Major	30,000	34,700	D
Bernardo Center Drive:				
Camino del Norte to W. Bernardo Dr.	4-lane Major Arterial	29,600	16,000	B
W. Bernardo Dr. to I-15	4-lane Major Arterial	30,000	15,500	B
I-15 to Rancho Bernardo Rd	4-lane Major Arterial	30,000	26,100	C
West Bernardo Drive:				
North of Rancho Bernardo Rd.	4-lane Major Arterial	30,000	16,000	B
Rancho Bernardo Rd to Bernardo Ctr. Dr.	4-lane Major Arterial	30,000	15,000	A

Table 4.5-1a (Continued)

EXISTING ROADWAY SEGMENTS LEVELS OF SERVICE

Roadway Segment	Cross-Section	LOS C Volume[1]	Daily Traffic Volume[2]	Los[3]
Black Mountain Road:				
North of Carmel Mountain Road	4-lane Major Arterial	30,000	15,700	B
South of Carmel Mountain Road	4-lane Major Arterial	30,000	12,900	B
Del Mar Heights Road:				
I-5 to El Camino Real	6-lane Primary	50,000	37,600	C
El Camino Real to Carmel Country Road	6-lane Primary	50,000	18,500	A
Carmel Country Rd to Lansdale Road	6-lane Primary	50,000	19,000	A

EXISTING FREEWAY SEGMENTS LEVELS OF SERVICE

Freeway Segments	Existing Daily Traffic Volume[4]	LOS
Interstate 15:		
North of Rancho Bernardo Road	160,000	F
Rancho Bernardo Road to Bernardo Center Drive	157,000	F
Bernardo Center Drive to Camino del Norte	163,000	F
South of Camino del Norte	163,000	F

1 Based on County or City of San Diego standards.
2 1992 or most recent, unless otherwise noted
3 Based on daily traffic volume thresholds given in the Traffic Technical Report.
4 Source: CALTRANS 1994 Traffic Volumes on California State Highways publication (May 1995)
* Unacceptable Level of Service

Source: Kimley-Horn and Associates, Inc. 1995.

Table 4.5-1b

EXISTING FREEWAY RAMP VOLUMES

Freeway Ramp	Daily Traffic Volume	AM Peak Hour Traffic Volume	PM Peak Hour Traffic Volume
I-15 at:			
Camino del Norte			
NB off	8,300	746	658
NB on	9,697	826	819
SB off	10,612	859	924
SB on	8,669	923	826
Bernardo Center Drive			
NB off	8,825	835	681
NB on	4,846	342	511
SB off	4,957	669	373
SB on	7,506	532	764
Rancho Bernardo Road			
NB off	12,676	811	1,223
NB on from EB	5,803	348	784
NB on from WB	6,146	423	518
SB off	11,218	1,281	745
SB on from EB	8,210	680	789
SB off from WB	4,811	479	294

Note: All ramps were counted in September 1994.

NB = North Bound
SB = South Bound
EB = East Bound
WB = West Bound

Source: Caltrans District 11 Traffic Volumes on California State Highways (1982-1994)

- Del Dios Highway/Citracado Parkway
- Rancho Bernardo Road/West Bernardo Drive
- Rancho Bernardo Road/Interstate 15 southbound ramps
- Rancho Bernardo Road/Interstate 15 northbound ramps
- Rancho Bernardo Road/Bernardo Center Drive
- Camino del Norte/Bernardo Center Drive
- Camino del Norte/Interstate 15 southbound ramps
- Camino del Norte/Interstate 15 northbound ramps
- Camino del Norte/Carmel Mountain Road

Existing morning and afternoon peak hourly traffic volumes for these key intersections are presented on Figure 4.5-2 along with the corresponding LOS. The intersection of Rancho Bernardo Road at Bernardo Center Drive is currently operating at LOS E or F conditions. In addition, the LOS in the evening peak hour at the intersections of Rancho Bernardo Road at West Bernardo Drive, and Rancho Bernardo Road at I-15 northbound ramps is also F. All other intersections currently operate at LOS D or better in both morning and afternoon peak hours.

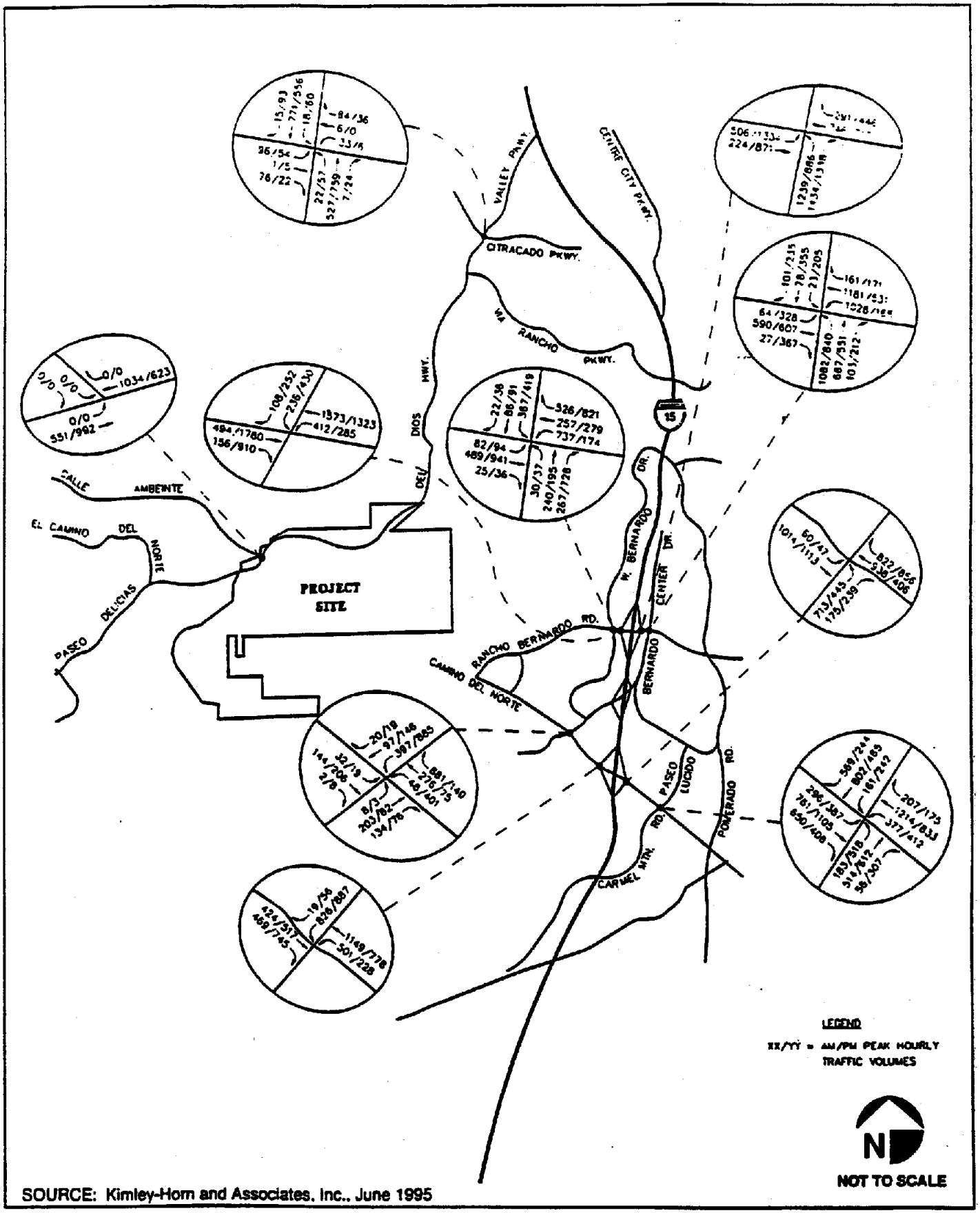
Public Transit Service

The only public transit available in the immediate vicinity of Santa Fe Valley is bus service. The North County Transit System operates the present bus service on the Del Dios Highway. Bus route number 308 runs along the Del Dios Highway and Villa De La Valle between Escondido and Solana Beach transit centers. Santa Fe Valley SPA's access to this bus service is the existing bus stop at the crossing of San Dieguito River on Del Dios Highway.

4.5.2 Specific Plan Area Impacts

Criteria for Significance Determination

Per CEQA guidelines, significant traffic impacts would occur if the project will create an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. Based on County policy, this would occur if a project contributes to reducing LOS to a level below D during peak traffic hours.



SOURCE: Kimley-Horn and Associates, Inc., June 1995

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Existing Peak Hourly Traffic Volumes at Key Intersections

FIGURE 4.5-2

Potential Impact Area

Two interrelated and overlapping analysis requirements are taken into account in defining the potential impact area:

- The County General Plan, specifically the Public Facility Element
- The Regional Congestion Management Program (CMP)

Based on previous planning efforts in the area, projected travel patterns to and from the Santa Fe Valley SPA, and knowledge of traffic and circulation issues in the San Dieguito area, County staff identified the Circulation Element roadways to be included in this analysis. Circulation Element roadways for Santa Fe Valley include both the existing and future roadways shown in Figure 4.5-1 within the project vicinity, and the proposed roadways in and around the Santa Fe Valley SPA, as depicted in Figure 3-5. These roadways make up the study area used for this analysis.

Proposed Santa Fe Valley Circulation System

The circulation system proposed for the Santa Fe Valley SPA is detailed in the Circulation Element of the Specific Plan and illustrated in Figure 3-5. The purpose of the Specific Plan Circulation Element is to establish the planning framework for the design and implementation of a safe, convenient, and efficient circulation system. The Circulation Element identifies the circulation system proposed to serve Santa Fe Valley at specified developmental thresholds, and establishes transportation facilities performance standards.

Policies outlined under the Specific Plan's Circulation Element aim to ensure that development within Santa Fe Valley is integrated with the regional roadway network and consistent with the County of San Diego's public and private road standards. Objective CE-2 of the Element requires gates on private roads within Santa Fe Valley to minimize traffic impacts on Del Dios Highway. In addition, public and private roads in Santa Fe Valley are to conform to the Specific Plan's circulation and community design standards. The proposed street system was determined based upon the traffic analysis (Appendix E) conducted in conjunction with the development of the Circulation Element. This analysis assessed the adequacy of the proposed circulation system with the County's goals and policies.

Table 4.5-2

EXISTING INTERSECTIONS LEVELS OF SERVICE

Intersection	AM Peak Hour Delay	AM Peak Hour LOS	PM Peak Hour LOS	PM Peak Hour Delay
Camino del Norte at Bernardo Center Drive	19.9	C	22.4	C
Camino del Norte at I-15 SB Ramps	30.8	D	22.0	C
Camino del Norte at I-15 NB Ramps	19.1	C	11.2	B
Camino del Norte at Carmel Mtn. Rd.	18.3	C	20.4	C
Rancho Bernardo Rd. at Bernardo Ctr. Dr.	**	F	51.5	E*
Rancho Bernardo Rd. at W. Bernardo Dr.	32.9	D	**	F
Rancho Bernardo Rd. at I-15 SB Ramps	6.1	B	13.0	B
Rancho Bernardo Rd. at I-15 NB Ramps	8.5	B	8.5	B
Del Dios Highway at Citracado Pkwy.	16.9	C	15.7	C

* unacceptable Level of Service

** Delay and Level of Service cannot be computed using HCS methodology because traffic on one or more approach movements exceeds approach capacity by more than 20 percent (V/C is greater than 1.2). LOS would be characterized by "F".

Note: Delay is in seconds and represents the average delay for all vehicles entering the intersection during the peak hour.

Source: Kimley-Horn and Associates 1995

The Santa Fe Valley project proposes residential, educational, recreational, commercial, and resort land uses. The western portion of the property (Planning Areas I and II) would take access onto Del Dios Highway in the north, Camino Ruiz in the southwest, and Camino del Norte in the southeast. This area is proposed mainly for the golf course, a resort hotel, and residential. All three access points will be guard-gated and would not allow through traffic from other developments, except for emergency purposes. As proposed, full turning movements would be allowed at all three intersections (see Figure 4.5-3). The access from the golf course and the resort hotel to Del Dios Highway would be accessible to public traffic. To access Del Dios Highway a two-lane bridge crossing of the San Dieguito River approximately 1,750 feet west of the existing Del Dios Highway/Calle Ambiente intersection is proposed. The traffic study for Santa Fe Valley analyzed the proposed crossing location which would form a second "T" intersection at Del Dios Highway. As planned, the existing intersection of Del Dios Highway/Calle Ambiente would remain.

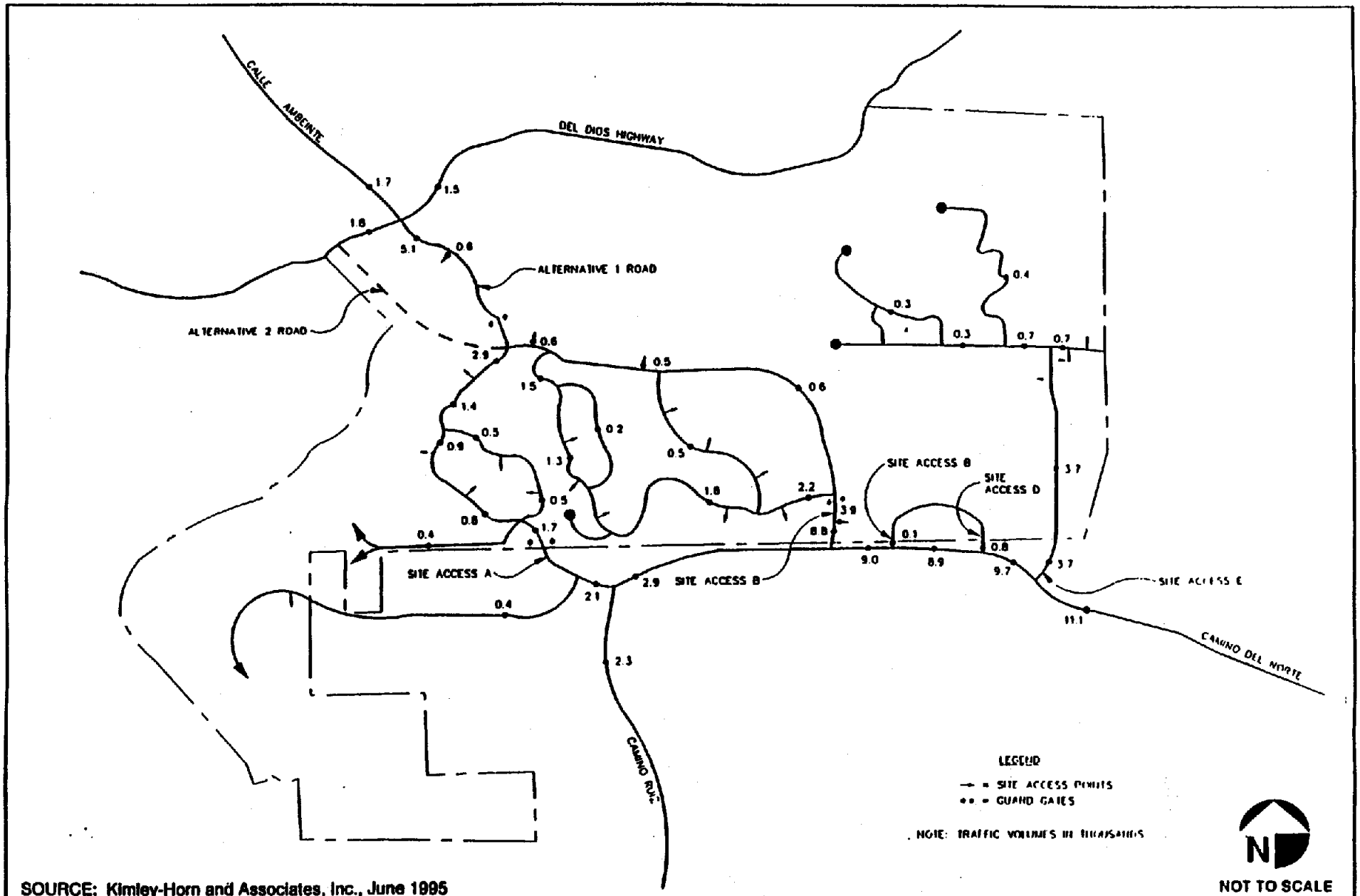
The eastern portion of the SPA (Planning Areas III, IV, and V) would have access to Camino del Norte via Four-Gee Road and site access streets "B" and "D" that intersect Camino del Norte. This area would consist of some residential uses, two schools, a group home facility, a park, and a fire station. Figure 4.5-3 depicts the Santa Fe Valley SPA proposed access locations.

Santa Fe Valley Trip Generation

The number of automobile trips estimated to be generated at buildout of the Santa Fe Valley Specific Plan is shown in Table 4.5-3. In total, Santa Fe Valley would generate approximately 22,060 trips per day, with 1,675 trips in the morning peak hour and 2,000 trips in the evening peak hour.

Santa Fe Valley Trip Distribution

The distribution and assignment of Santa Fe Valley traffic on the surrounding roadway system is based on the SANDAG traffic forecasting model. This model was used to determine the distribution of Santa Fe Valley traffic based on the future buildout of the Santa Fe Valley Specific Plan and the surrounding roadway network. The daily and peak hourly traffic volumes on the roadways and intersections within the Santa Fe Valley SPA



SOURCE: Kimley-Horn and Associates, Inc., June 1995

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Santa Fe Valley Average Daily Traffic Volumes (Onsite)

FIGURE 4.5-3

Table 4.5-3

SANTA FE VALLEY TRIP GENERATION

Land Use	Units	Rate	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
Residential, Single Family	1,141 du	10/du	11,410	180	730	795	340
Residential, Multi-Family	177 du	8/du	1,410	20	90	95	40
Group Home	200 rms	3/rm	600	10	10	20	20
Resort Hotel	250 rms	8/rm	2.000	60	40	55	80
Elementary School	12 ac	60/ac	720	110	45	10	25
Middle School	23 ac	40/ac	920	155	65	15	45
Commercial	5 ac	700/ac	3,500	60	40	175	175
Golf Club House	1 unit	NOMINAL					
9-hole Golf Course	1 unit	300/unit	300	10	0	5	15
18-hole Golf Course	1 unit	600/unit	600	25	5	15	35
Park	12 ac	50/ac	600	10	10	20	20
Fire Station	1-7 ac	NOMINAL					
Treatment Plant	±4 ac	NOMINAL					
TOTAL			22,060	640	1,035	1,205	795

Source: Kimley-Horn and Associates, Inc. June 1995

are shown on Figure 4.5-3. The volume of Santa Fe Valley daily traffic distributed to the surrounding Circulation Element road system is shown on Figure 4.5-4.

Future Roadway System

In order to assess the impact of Specific Plan buildout on the circulation system, future improvements to the existing roadway system were assumed to occur based on already planned infrastructure improvements in adopted City and County Plans and Capital Improvement Budgets. Circulation Element future roadway configurations were taken from the County of San Diego General Plan and the City of San Diego North City Future Urbanizing Area (NCFUA) Framework Plan Circulation Element. These improvement assumptions are described below.

Planned Roadway Improvements

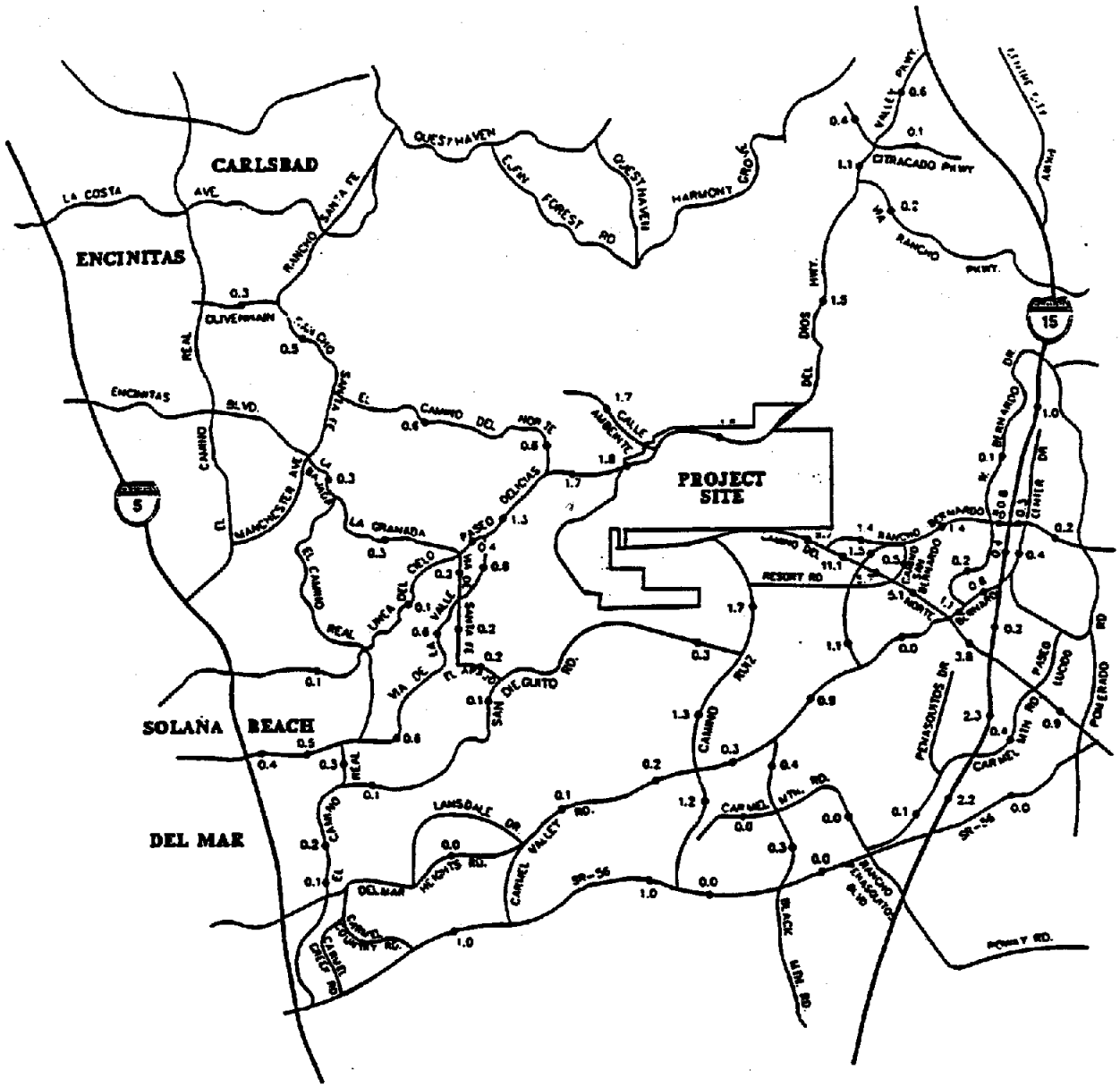
New Circulation Element roads and existing facilities in the San Dieguito and Rancho Bernardo Community Plan areas planned to be upgraded to General Plan classifications are summarized below. No time frame or funding for any of these upgrades has been identified to date.

County Roadways:

- Del Dios Highway, east and north of Calle Ambiente, is planned as a four-lane collector.
- Paseo Delicias is planned to be improved as a two-lane light collector.
- Via de la Valle is planned to be improved as a two-lane light collector.

City of San Diego Roadways:

- Black Mountain Road is planned to be extended north to the future Carmel Valley Road and is also planned to be widened to a six-lane primary arterial from SR-56 to Mercy Road.



NOTE: TRAFFIC VOLUMES IN THOUSANDS

N

NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc., June 1995

OGDEN

Santa Fe Valley ADT Volumes on Buildout Network (Offsite)

FIGURE 4.5-4

- Camino Ruiz is a planned four-lane major road in the City's NCFUA to connect the proposed Camino del Norte to San Dieguito Road.

- Carmel Valley Road is planned to be extended as a four-lane major street from Del Mar Heights Road to Camino del Norte.

- Rancho Bernardo Road is built as a four-lane major arterial from Pomerado Road in Rancho Bernardo west to its current terminus in the 4S Business Park. The segment between West Bernardo Drive and Bernardo Center Drive is planned for widening to a six-lane major road.

- San Dieguito Road - eastern extension - is planned to connect to Camino Ruiz as part of the City's NCFUA Framework Plan.

- Via de la Valle is planned to be widened to a four-lane major arterial within the City of San Diego between El Camino Real and I-5.

- State Route 56 (SR-56) is an east-west freeway which, when completed, will connect the I-5 freeway (at Carmel Valley Road) to the I-15 freeway (at Ted Williams Parkway). SR-56 would represent a major addition to the overall carrying capacity of the circulation system in the San Dieguito area. The easternmost segment of SR-56, between Black Mountain Road and I-15, has been constructed and is open to traffic. The segment between I-5 and El Camino Real is under construction, including the I-5 interchange. The central portion of SR-56, in accordance with Caltrans District 11, will be constructed between the years 2000 and 2010.

- Camino del Norte is classified as a major road/prime arterial connecting Camino Ruiz and I-15 and extending further east. The segments west of Camino del Norte are also referenced as SA 680 in the County's General Plan. Previously, SA 680/Camino del Norte was planned to cross the San Dieguito River and to connect to either the City of Encinitas or extend north in San Marcos as an extension of Melrose Avenue. The County of San Diego is preparing an EIR to analyze the impacts of deleting SA 680 as a regional arterial crossing of the San Dieguito River. The expectation is that SA 680/Camino del Norte will no longer be considered a regional facility.

Camino del Norte is planned to be upgraded from a six-lane primary arterial to an expressway from Rancho Bernardo Road running southeast past the I-15 freeway. A grade separated interchange is planned for the intersection with Bernardo Center Drive.

Buildout Daily Traffic Forecasts

The area surrounding Santa Fe Valley is planned for a major transition from primarily open space and agricultural uses to suburban development, which must be taken into consideration in order to accurately assess traffic impacts in this area. Several development proposals are presently being considered or have already been approved by the County and City of San Diego, the outcome of which will add a substantial number of vehicular trips to the area. These projects include the 4S Ranch Specific Plan to the east of Santa Fe Valley and the NCFUA in the City of San Diego's jurisdiction to the south. Future development in these areas will have a substantial affect on traffic patterns in the area. The assumptions used for these areas to forecast traffic volumes and distribution are described below.

The land use data for the traffic forecast included the NCFUA Framework Plan, with the exception of Sub Area 1A (the most northerly development area called the Black Mountain Ranch project). The land use assumption used for this area was according to development proposals under consideration for this Sub Area. The proposed land uses for the 4S Ranch SPA, and regional land use buildout assumptions under SANDAG's Regional Growth Forecast (Series 7) were also used to represent the future traffic condition of the study area.

The more intense land use assumptions for Sub Area 1A of the NCFUA were used to reserve adequate arterial capacity for future growth in the Camino del Norte corridor assuming the proposed Sub Area 1A is approved. Camino del Norte, to be constructed through the Black Mountain Ranch area, will be the primary access for the three major land use proposals being considered in this area (i.e., Santa Fe Valley, 4S Ranch, and the NCFUA). This approach insures that the capacity of Camino del Norte is shared between the three projects.

Buildout Traffic Volumes

Figure 4.5-5 illustrates future daily traffic volumes in the area of Santa Fe Valley assuming:

- The Santa Fe Valley Specific Plan would be built out, representing about 22,060 daily trips.

- The NCFUA would develop in accordance with the Framework Plan and not the subarea plans previously prepared with the exception of Sub Area 1A. The Framework Plan assumed an approximate density of 1.1 dwelling units per acre (a total of about 11,850 dwelling units), with 3 mixed-use village cores on a total of about 87 acres, and about 194 acres that could be developed with a variety of retail, commercial, office, and similar uses. These non-residential uses represent about 1,040,000 square feet of building area. Total trip generation for the NCFUA was assumed to be approximately 160,000 daily trips.

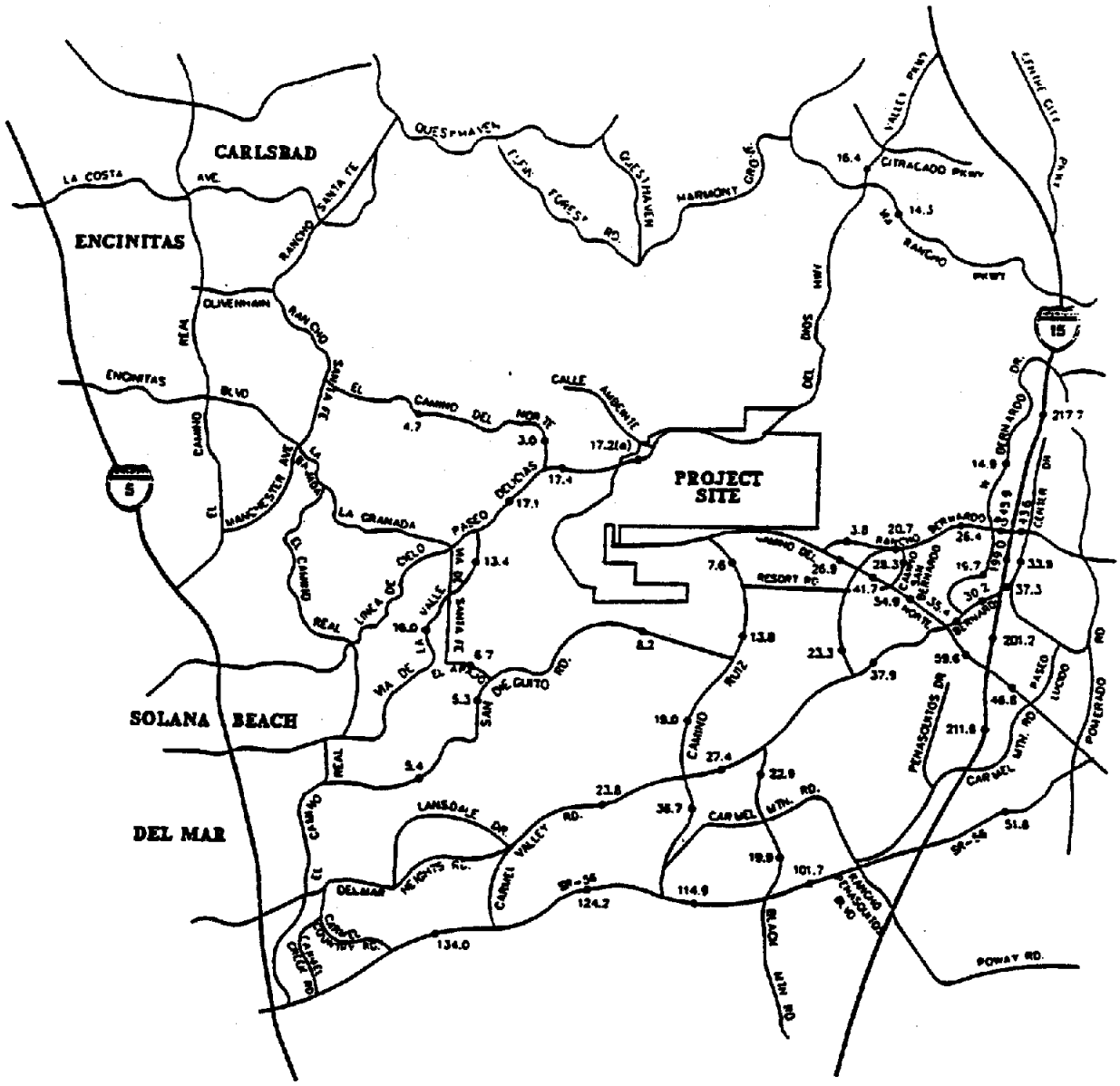
- Sub Area 1A in the Black Mountain Ranch area of the NCFUA proposes 1,125 single family and 2,215 multi-family dwelling units, 14 acres of commercial/retail uses, and 26 acres of office uses. Total trips for Sub Area 1A would be about 38,000 trips per day. Total trips for the NCFUA would be about 198,000 trips per day, consisting of 38,000 for Sub Area 1A and 160,000 for the remainder of the NCFUA, if developed in accordance with the Framework Plan.

- The 4S Ranch project as currently proposed would generate approximately 80,000 daily trips.

- SA 680 would not be constructed.

Traffic Impact Analysis

The following discussion describes the results of the traffic analysis for both roadways and intersections affected by the Santa Fe Valley project and surrounding area growth.



NOTE: TRAFFIC VOLUMES IN THOUSANDS

(a) ASSUMING ACCESS FOR SANTA FE VALLEY IS ALIGNED WITH CALLE AMBIENTE. WITH PROPOSED ACCESS ROAD INTERSECTING DEL DIOS HIGHWAY TO THE WEST. TRAFFIC VOLUME WOULD BE 18,900 BETWEEN THE TWO INTERSECTIONS.

N

NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc., June 1995

OGDEN

Future ADT Volumes
(Offsite)

FIGURE

4.5-5

Buildout Roadway Operation Analysis

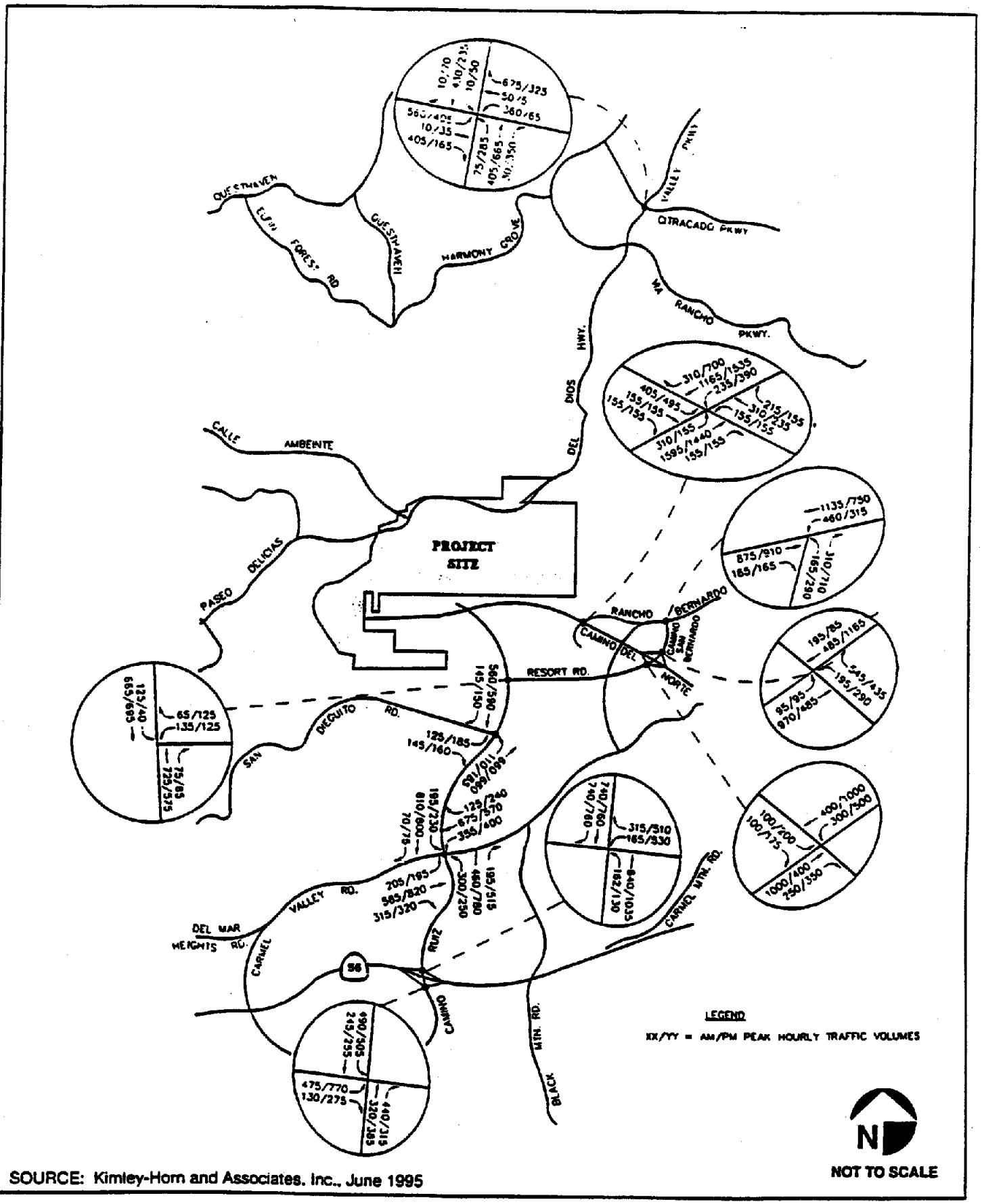
Figures 4.5-6, 4.5-7, and 4.5-8 illustrate the future peak hourly traffic volumes at the off-site and on-site study area intersections under the above assumptions.

Buildout traffic volumes on the roadway segments in the Santa Fe Valley traffic study area were compared to estimated buildout roadway capacity per the County and City of San Diego standards. The buildout roadway analysis is shown in Table 4.5-4 (a and b). Review of Table 4.5-4 (a and b) shows that all roadway segments analyzed are projected to operate at acceptable levels of service (LOS C in County or LOS D in City of San Diego) with the following exceptions:

- Del Dios Highway from the project entrance to El Camino del Norte would operate at LOS F. Santa Fe Valley traffic on this segment would contribute about 1,700 vehicles per day (vpd), or about 10 percent of the total future traffic volume on this segment. This is considered a significant impact due to Santa Fe Valley's contribution to a poor traffic situation on Del Dios Highway. As shown in Table 4.5-1a, Del Dios Highway carries well over twice as many cars as the roadway is designed to carry.

- Paseo Delicias between El Camino del Norte and Via de la Valle would operate at LOS F. Santa Fe Valley traffic on this segment would contribute about 1,300 vpd, or about 7 percent of the total future traffic volume on this segment. This is considered a significant impact due to Santa Fe Valley's contribution to a poor traffic situation on this segment. As shown in Table 4.5-1a, Paseo Delicias carries almost three times the number of cars the roadway is designed to carry.

- San Dieguito Road between Camino Ruiz and El Apajo would operate at LOS D. Santa Fe Valley traffic on this segment would contribute about 300 vpd or about 3 percent of the total future traffic volume on this segment. Santa Fe Valley's traffic contribution to this segment is minor, and not considered significant.



LEGEND

XX/YY = AM/PM PEAK HOURLY TRAFFIC VOLUMES

N

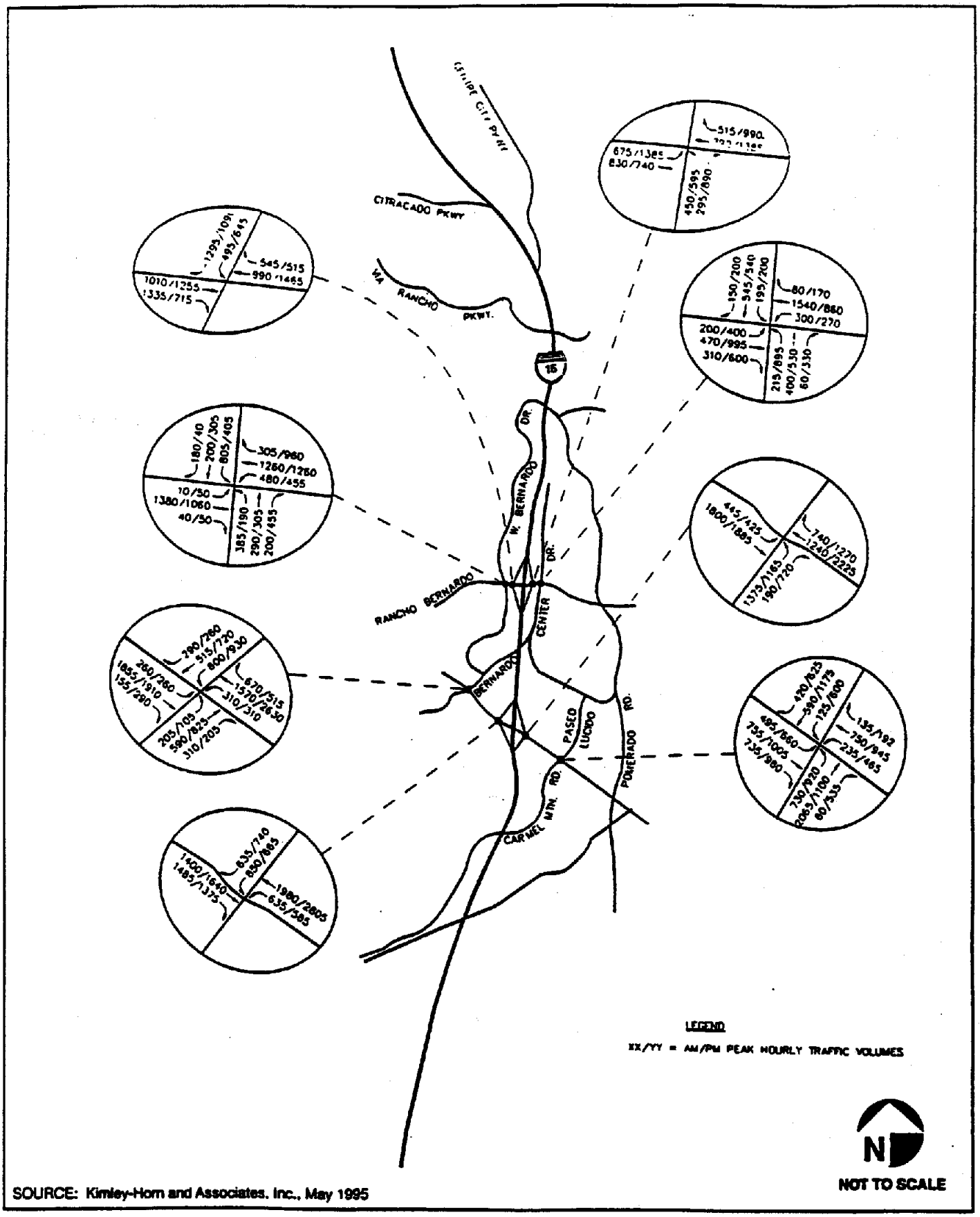
NOT TO SCALE

SOURCE: Kimley-Horn and Associates, Inc., June 1995

OGDEN

Buildout Peak Hourly Traffic Volumes for Offsite Intersections

FIGURE 4.5-6

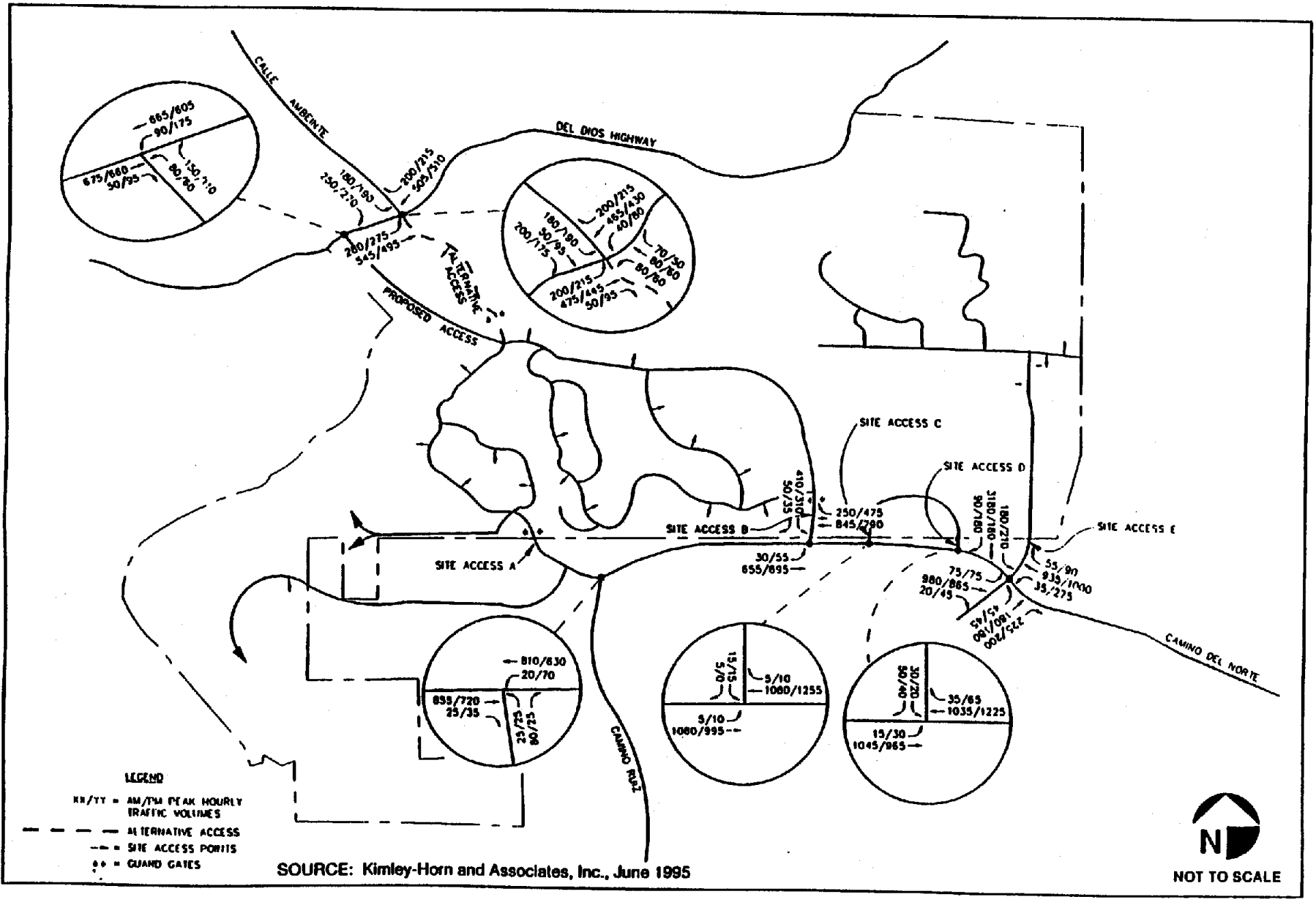


SOURCE: Kimley-Horn and Associates, Inc., May 1995

OGDEN

Buildout Peak Hourly Traffic Volumes for Offsite Intersections

FIGURE 4.5-7



SOURCE: Kimley-Horn and Associates, Inc., June 1995

OGDEN

Buildout Peak Hourly Traffic Volumes for Onsite Intersections

FIGURE 4.5-8

Table 4.5-4a

FUTURE BUILDOUT ROADWAY SEGMENTS LEVELS OF SERVICE

Roadway Segment	General Plan Classification	LOS C Threshold Volume[1]	Daily Traffic Volume[2]	LOS[3]	Santa Fe Valley/Total Traffic
Del Dios Highway:					
El Camino del Norte to Via Rancho Parkway	4-lane Collector	27,400	17,200	B	10%
Via Rancho Pkwy to Citracado Pkwy	4-lane Major Road	29,600	16,400	B	3%
Project Entrance to El Camino del Norte	2-lane Light Coll.	7,100	17,100	F*	10%
Paseo Delicias					
El Camino del Norte to Via de La Valle	2-lane Light Coll.	7,100	17,100	F*	7%
Via De La Valle:					
West of Via de Santa Fe	2-lane Collector	7,100	16,000	E*	3%
East of Via de Santa Fe	2-lane Collector	7,100	13,400	E*	6%
El Camino Del Norte					
Paseo Delicias to Aliso Canyon Rd	2-lane Light Collector	7,100	3,000	B	10%
Aliso Canyon Road to Rancho Santa Fe Rd	2-lane Light Collector	7,100	4,700	C	12%
San Dieguito Road:					
Camino Ruiz to El Apajo (County of San Diego jurisdiction)	2-lane Light Collector	7,100	8,200	D*	3%
El Apajo to Camino Santa Fe (County of San Diego jurisdiction)	2-lane Collector	7,100	7,100	C	2%
South of Camino Santa Fe (City of San Diego jurisdiction)	2-lane Light Coll.	7,500	5,900	C	2%
El Apajo:					
Via Santa Fe to San Deguito Rd	2-lane Light Collector	7,100	6,700	C	3%

Table 4.5-4a (Continued)

FUTURE BUILDOUT ROADWAY SEGMENTS LEVELS OF SERVICE

Roadway Segment	General Plan Classification	LOS C Threshold Volume[1]	Daily Traffic Volume[2]	LOS[3]	Santa Fe Valley/Total Traffic
Via Rancho Parkway:					
Del Dios Highway to I-15	4-lane Major Road	29,600	14,300	A	1%
Camino San Bernardo:					
Camino del Norte to Rancho Bernardo Rd	4-lane Major Road	29,600	28,300	C	1%
Camino Del Norte:					
West Loop Rd to East Loop Rd	4-lane Major Arterial[4]	30,000	5,500	A	52%
East Loop Road to Planning Area IV.4 West	4-lane Major Arterial[4]	30,000	11,700	A	77%
Planning Area IV.4 West and East Access Points	4-lane Major Arterial[4]	30,000	11,500	A	77%
Planning Area IV.4 East Access to Four Gee Road	4-lane Major Arterial[4]	30,000	12,300	A	78%
Four Gee Road to Rancho Bernardo Road	4-lane Major Arterial[4]	30,000	31,600	D	35%
Rancho Bernardo Road to Black Mountain Road (County of San Diego jurisdiction)	6-lane Prime Arterial[4]	44,600	26,900	B	35%
Black Mountain Road to Camino San Bernardo (County of San Diego jurisdiction)	6-lane Prime Arterial[4]	44,600	41,700	C	13%
Camino San Bernardo to Bernardo Center Drive	6-lane Prime Arterial	50,000	54,900	D	9%
Bernardo Ctr Dr to I-15	6-lane Prime Arterial	50,000	59,600	E*	6%
I-15 to Carmel Mountain Rd	6-lane Prime Arterial	50,000	46,800	C	3%

Table 4.5-4a (Continued)

FUTURE BUILDOUT ROADWAY SEGMENTS LEVELS OF SERVICE

Roadway Segment	General Plan Classification	LOS C Threshold Volume[1]	Daily Traffic Volume[2]	LOS[3]	Santa Fe Valley/Total Traffic
Camino Ruiz:					
Camino del Norte to Resort St	4-lane Major Arterial	30,000	7,600	A	22%
Resort Street to San Dieguito Rd	4-lane Major Arterial	30,000	13,800	A	11%
San Dieguito Rd to Carmel Valley Rd	4-lane Major Arterial	30,000	19,000	B	6%
Carmel Valley Rd to SR-56	6-lane Prime Arterial	50,000	36,700	C	3%
Rancho Bernardo Road:					
Camino del Norte to Black Mountain Road (County of San Diego jurisdiction)	4-lane Major	29,600	4,500	A	31%
Black Mountain Road to Camino San Bernardo (County of San Diego jurisdiction)	4-lane Major	29,600	20,700	B	7%
Camino San Bernardo to W. Bernardo Road	4-lane Major	30,000	26,400	C	3%
W. Bernardo Road to Interstate 15	6-lane Major Arterial	40,000	45,900	E*	2%
Interstate 15 to Bernardo Center Drive	6-lane Major Arterial	40,000	43,600	D	.6%
Camino del Norte to West Bernardo	6-lane Major Arterial	40,000	35,400	C	3%
West Bernardo to I-15	4-lane Major Arterial	30,000	30,200	D	2%
I-15 to Bernardo Heights Parkway	6-lane Major Arterial	40,000	37,300	C	0.8%
Bernardo Heights Parkway to Rancho Bernardo Road	4-lane Major Arterial	30,000	33,900	D	0.5%

Table 4.5-4a (Continued)

FUTURE BUILDOUT ROADWAY SEGMENTS LEVELS OF SERVICE

Roadway Segment	General Plan Classification	LOS C Threshold Volume[1]	Daily Traffic Volume[2]	LOS[3]	Santa Fe Valley/Total Traffic
West Bernardo Drive:					
I-15 to Rancho Bernardo	4-lane Major	30,000	14,900	A	0%
Rancho Bernardo to Bernardo Center	4-lane Major	30,000	19,700	B	1%
Black Mountain Road:					
Camino del Norte to Carmel Valley Road	4-lane Major Arterial	30,000	23,300	C	4%
Carmel Valley Road to Carmel Mountain Road	4-lane Major Arterial	30,000	22,900	C	1%
Carmel Mountain Road to SR-56	4-lane Major Arterial	30,000	19,900	B	1%
Carmel Valley Road:					
West of Camino Ruiz	4-lane Major Arterial	30,000	23,800	C	.8%
Camino Ruiz to Black Mountain Road	4-lane Major Arterial	30,000	27,400	C	1%
Black Mountain Rd to Camino del Norte	4-lane Major Arterial	30,000	37,900	D	2%

Table 4.5-4b

BUILDOUT FREEWAY SEGMENTS LEVELS OF SERVICE

Freeway Segment	Buildout Daily Traffic	LOS	Santa Fe Valley/Total Traffic
Interstate 15:			
North of Rancho Bernardo Road	217,700	F	.4%
Rancho Bernardo Road to Bernardo Center Drive	199,000	F	.2%
Bernardo Center Drive to Camino del Norte	201,200	F	.09%
South of Camino del Norte	211,600	F	1%
State Route 56:			
West of Carmel Valley Road	134,000	F	.7%
Carmel Valley Road to Camino Ruiz	124,200	F	.8%
Camino Ruiz to Black Mountain Road	114,900	F	0%
Black Mountain Road to I-15	101,700	F	0%
I-15 to Pomerado Road	51,800	F	0%

1 Based on County and City of San Diego standards.
2 Buildout based on SANDAG Series VIII and no SA 680
3 Based on daily traffic volume thresholds given in Appendix A Traffic Technical Report.
4 Lesser classification would be sufficient for acceptable LOS.
* Indicates traffic volume exceeds LOS C threshold (County of San Diego General Plan) or LOS D threshold (City of San Diego).

- Camino del Norte between Bernardo Center Drive and I-15 would operate at LOS E. Santa Fe Valley traffic on this segment would represent about 3,800 vpd. or about 6 percent of the total future traffic volume on this segment. Although this roadway segment is projected to operate at LOS E even if Santa Fe Valley is not developed. this is considered a significant impact due to Santa Fe Valley's contribution to a poor traffic situation on this segment.

- Rancho Bernardo Road between West Bernardo Road and I-15 would operate at LOS E. Santa Fe Valley traffic on this segment would contribute about 800 vpd, or about 2 percent of the total future traffic volume on this segment. Although this roadway segment is projected to operate at LOS E even if Santa Fe Valley is not developed, Santa Fe Valley contributes traffic to a roadway experiencing a poor level of service. This is considered a significant impact.

San Dieguito Community Plan Evaluation

Two roadways within the County's San Dieguito Community Plan area, Del Dios Highway and Paseo Delicias, are currently operating at poor levels of service to which Santa Fe Valley traffic would contribute. A typical solution to this poor circulation situation would be to widen the roadways to accommodate the traffic. However, as the San Dieguito Community Plan points out, the character of established communities can be significantly impacted by roadway construction. The San Dieguito Community Plan contains policies that are meant to retain the narrow rural character of the San Dieguito roads. Del Dios Highway and Paseo Delicias are both at their maximum roadway classifications considered acceptable by the San Dieguito community. Therefore. widening roadways in this area is considered inconsistent with the community plan.

Buildout Intersection Operation Analysis

A summary of the results of the buildout intersection analysis is presented in Table 4.5-5 (a and b). Table 4.5-5 indicates that five intersections in the study area would operate at unacceptable levels of service (i.e., LOS F) both in the morning and afternoon peak hours under buildout conditions. The five intersections that would operate at LOS F are:

Table 4.5-5a

FUTURE BUILDOUT INTERSECTIONS LEVELS OF SERVICE

Signalized Intersections	AM Peak Hour Delay	AM Peak Hour LOS	PM Peak Hour Delay	PM Peak Hour LOS
Camino del Norte at Bernardo Center Drive	**	F	**	F
Camino del Norte at Camino Ruiz-Access A	8.7	B	9.3	B
Camino del Norte at Rancho Bernardo Rd	32.1	D	31.7	D
Camino del Norte W. at Camino San Bernardo	22.5	C	23.8	C
Camino del Norte at Camino San Bernardo	20.5	C	18.7	C
Camino del Norte at I-15 SB Ramps	**	F	**	F
Camino del Norte at I-15 NB Ramps	**	F	**	F
Camino del Norte at Carmel Mtn. Rd.	38.3	D	**	F
Camino Ruiz at Resort Street	10.3	B	8.5	B
Camino Ruiz at San Dieguito Road	19.4	C	19.8	C
Camino Ruiz at Carmel Valley Road	22.1	C	25.3	D
Camino Ruiz at SR-56 WB Ramps	10.6	B	17.6	C
Camino Ruiz at SR-56 EB Ramps	21.4	C	23.0	C
Rancho Bernardo Rd. at Bernardo Ctr. Dr.	65.0	F*	72.7	F*
Rancho Bernardo at Camino San Bernardo	20.4	C	18.2	C
Rancho Bernardo Rd. at W. Bernardo Dr.[a]	**	F	**	C
Rancho Bernardo Rd. at I-15 SB Ramps	12.0	B	19.7	C
Rancho Bernardo Rd. at I-15 NB Ramps	4.0	A	3.9	A
Del Dios Highway at Citracado Pkwy.	26.1	D	15.1	C
Del Dios Highway at Calle Ambiente (Alt 1)	21.4	C	22.3	C
Del Dios Highway at Calle Ambiente (Alt.2)	11.0	B	11.4	B
Del Dios Highway at Site Drive (Alt.2)	10.5	B	11.0	B
Camino del Norte at Site Access B	8.3	B	8.9	B
Camino del Norte at Site Access E	22.1	C	26.3	D

Source: Kimley-Horn and Associates, Inc. June 1995

Table 4.5-5b

FUTURE BUILDOUT INTERSECTIONS LEVELS OF SERVICE

Unsignalized Intersections	AM Peak Hour		PM Peak Hour	
	Reserve Capacity	LOS	Reserve Capacity	LOS
Camino del Norte at Site Access C				
SB Left	51	E	54	E
SB Right	529	A	459	A
EB Left	270	C	205	C
Camino del Norte at Site Access D				
SB Left	22	E	29	E
SB Right	486	A	424	A
EB Left	281	C	175	D

Source: Kimely-Horn and Associates 1995

(a) Without grade separation.
** Delay and level of service cannot be computed using HCS methodology because traffic on one or more approach movements exceeds approach capacity by more than 20 percent (V/C is greater than 1.2). LOS would be characterized by "F".

SB = South Bound
NB = North Bound
EB = East Bound

Note: Delay is in seconds and represents the average delay for all vehicles entering the intersection during the peak hour.

- Camino del Norte at Bernardo Center Drive
- Camino del Norte at I-15 southbound ramps
- Camino del Norte at I-15 northbound ramps
- Rancho Bernardo Road at Bernardo Center Drive
- Rancho Bernardo Road at West Bernardo Drive

Santa Fe Valley would contribute a small amount of traffic at each of these intersections compared to other development in this area. Total daily trips for Santa Fe Valley would be 22,060 vpd compared to about 80,000 vpd for 4S Ranch, about 38,000 vpd for Sub Area 1A, and about 198,000 vpd for the NCFUA as a whole. Likewise, on the roadway segments abutting the intersections expected to be congested, Santa Fe Valley would contribute a small percentage of the total traffic. The contribution of Santa Fe Valley traffic to these intersections are described below.

- At the intersection of Camino del Norte/Bernardo Center Drive, on Camino del Norte, Santa Fe Valley traffic would constitute 9 and 7 percent of the total traffic on the east and west legs, respectively. On Bernardo Center Drive, Santa Fe Valley traffic would represent about 3 percent on the north leg and a nominal amount on the south.

- At the I-15/Camino del Norte interchange, on Camino del Norte, Santa Fe Valley traffic would represent about 6 percent and 3 percent, east and west of I-15, respectively.

- At the intersection of Rancho Bernardo Road/Bernardo Center Drive, Santa Fe Valley traffic on Rancho Bernardo Road would contribute less than 1 percent of the total traffic. On Bernardo Center Drive, Santa Fe Valley traffic would contribute a nominal amount.

- At the intersection of Rancho Bernardo Road/West Bernardo Drive, Santa Fe Valley traffic on Rancho Bernardo Road would represent about 3 percent and 2 percent of the total traffic, on the east and west legs, respectively. Santa Fe Valley traffic on West Bernardo Drive would contribute a nominal amount.

Although the Santa Fe Valley project would contribute a small proportion of traffic to these intersections, the impact is considered significant because of a cumulative contribution to a poor traffic situation.

Santa Fe Valley Access on Del Dios Highway

The proposed access for Santa Fe Valley at Del Dios Highway is located about 1,750 feet west of the Del Dios Highway/Calle Ambiente T-intersection. The Santa Fe Valley access at Del Dios Highway was analyzed as a T-intersection with full turning movements west of the Calle Ambiente T-intersection. Figure 4.5-8 illustrates the peak hourly traffic volumes at the proposed project access.

The results of a traffic signal warrant analysis indicated that the proposed T-intersection configuration would require signalization. Furthermore, the existing Calle Ambiente/Del Dios Highway T-intersection would also require signalization. With signalization, both intersections would operate at LOS B in the morning and afternoon peak hours, under buildout conditions.

Congestion Management Program Compliance

The San Diego County Congestion Management Program (CMP) was developed in response to California Proposition 111, approved June 1990, and is intended to directly link land use, transportation, and air quality. The Traffic Technical Report prepared for the Santa Fe Valley Specific Plan contains a complete CMP analysis.

According to the CMP analysis, Santa Fe Valley does not cause a change in LOS from acceptable to unacceptable on any regionally significant arterials (the regionally significant arterials include I-15, SR56, Rancho Bernardo Road, Camino del Norte, Camino Ruiz, and Del Dios Highway). Therefore, it is concluded that Santa Fe Valley does not have an impact on the CMP system.

Santa Fe Valley Proposed Phasing Plan

The Specific Plan's Circulation Element proposes a phased transportation system to link Santa Fe Valley to the existing surrounding circulation system. The Specific Plan is to be implemented over a 15-year time frame; however, transportation facilities and circulation

improvements are required to be implemented prior to allowed development on the SPA. A four-phase development phasing plan is proposed for the SPA, with associated roadway improvements. as presented in Table 4.5-6. The Planning Areas on the SPA that correspond to the phases described below and in Table 4.5-6 are shown in Figure 4.5-9.

The number of trips associated with each phase is detailed in Appendix E. Phase I East would constitute a small amount of development with less than five percent of the total trips in the area (i.e., less than 1,100 trips). Phase II would represent about one-half of the total trips in the area (i.e., about 11,000 trips). Phase III would represent build-out at 22,060 trips. The alternate initial development phase (Phase I West) for Planning Areas II and III could occur simultaneously with, or independently of, Phase I East. Phase I West would represent about 15 percent of the total trips in the area or about 3,300 trips.

Other development projects in the area were not analyzed specifically and individually. Rather, the increase in traffic in the area was assumed to occur in accordance with other development projects as described earlier in this section.

Phasing Plan Analysis

Phase I East. This phase of the four-phase plan would consist of the initial development of Planning Areas I, II, III, IV and V (Figure 4.5-9) and would only have access to the SPA from the east. This initial phase would only allow 100 total dwelling units on the SPA, including the existing 20 homes onsite.

As noted in Table 4.5-6, access to the east would require the addition of a connection to the existing roadway network east of the project site. A two-lane improvement of Camino del Norte is proposed to be constructed to provide access from the project site east to connect to the existing Rancho Bernardo Road in the 4S Ranch SPA. The connection to Rancho Bernardo Road is proposed as a temporary roadway, to be abandoned in Phase II. The roadway would extend as far west as necessary to serve the 100 units in the Santa Fe Valley SPA.

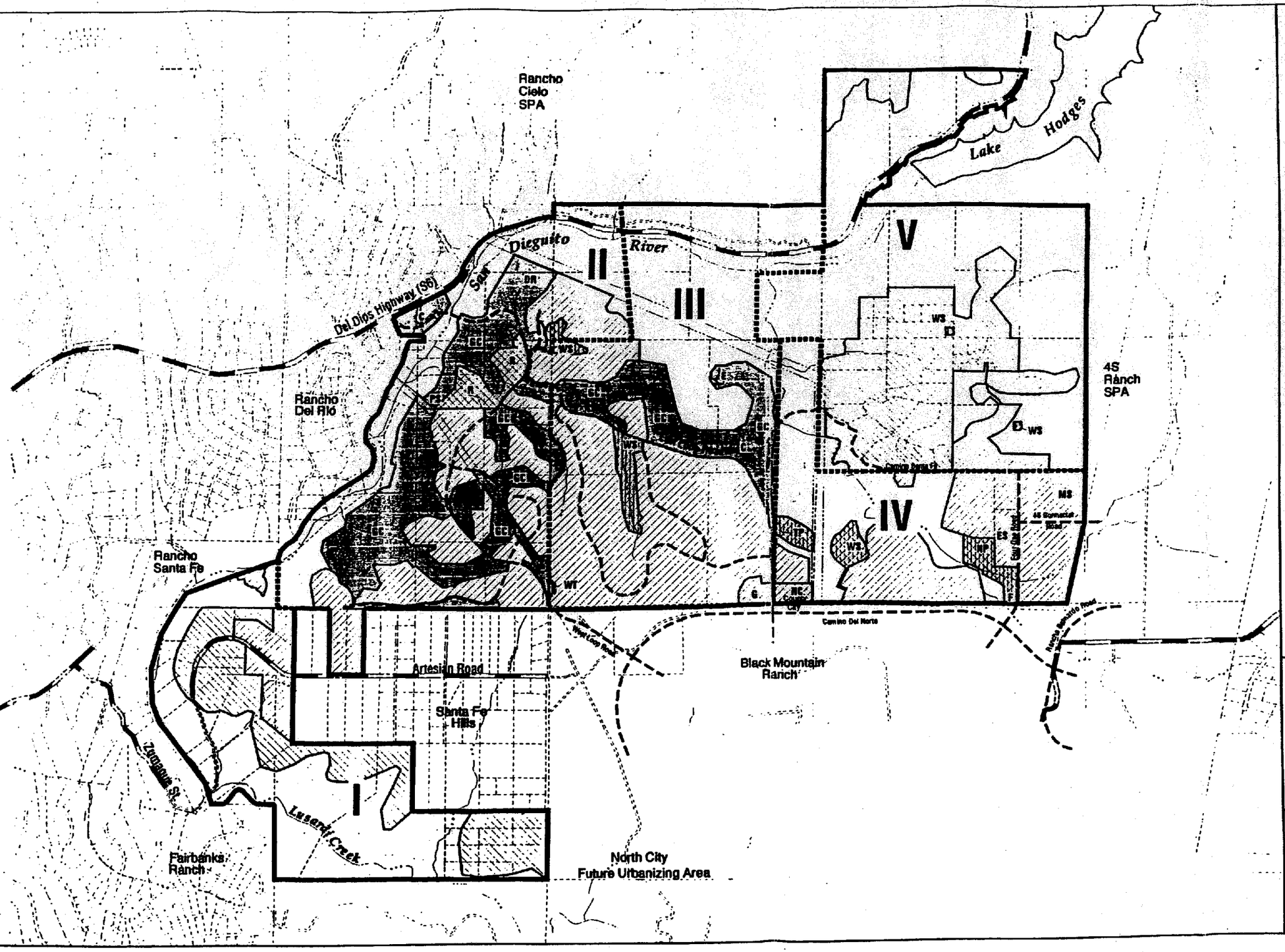
According to the phasing analysis for the Santa Fe Valley Specific Plan, during the construction of Phase I East combined with surrounding traffic, the LOS on Rancho Bernardo Road, between West Bernardo Drive and I-15, would drop from an LOS of E to LOS F. However, this would occur even without the Santa Fe Valley traffic contribution

Table 4.5-6

PROPOSED SANTA FE VALLEY SPECIFIC PLAN DEVELOPMENT PHASING AND CIRCULATION IMPROVEMENTS

Phase and Location[1]	Land Use Threshold	Proposed Circulation Improvements
PHASE I EAST Initial development phase for Planning Areas I, II, III, IV, V with access to the east only.	100 dwelling units, including the existing homes within the SPA.	Improvement of two lanes (28' of pavement) of Camino Del Norte as far west as necessary; east to connect to the existing Rancho Bernardo Road in 4S Ranch SPA.
PHASE II Second development phase for Planning Areas I, II, III, IV and V with access to east (all Planning Areas) and for west (Planning Areas II and III only).	Up to 800 dwelling units, resort facility, 9-hole golf course, clubhouse, and group care facility.	Extension of two lanes (28' of pavement) of Camino del Norte east from the City/County boundary to existing Camino del Norte interchange in 4S Ranch SPA; and westerly as necessary for access, if not completed in Phase I.
PHASE III Build-out of all Planning Areas in the SPA.	Remaining SPA buildout.	Additional improvement of Camino del Norte (from 28' to 40' of pavement) as far west as necessary for access to Camino San Bernardo in 4S Ranch; and Four Gee Road from Camino del Norte intersection to Camino Santa Fe; and 4S Ranch Connector Road to 4S Ranch SPA.
PHASE I WEST Initial development phase for Planning Areas II and III with access to the west only.	300 dwelling units and 18-hole golf course with clubhouse facility.	Bridge construction to cross San Dieguito River, road and traffic signal improvements at the intersection of Del Dios Highway, and Del Dios Connector Road.

[1] Refer to Figure 4.5-9 for location of Planning Areas.
Source: County of San Diego 1995



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Specific Plan Planning Areas

FIGURE 4.5-9

(which is less than 1 percent): thus. this impact is not considered a significant impact of the project. All intersections in the area would operate at acceptable levels of service (see Table 4.5-7).

Table 4.5-7

INTERSECTION LEVEL OF SERVICE PHASE I EAST

Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Camino del Norte at Bernardo Center Drive	23.6	C	31.7	D
Camino del Norte at I-15 SB Ramps	21.9	C	17.6	C
Camino del Norte at I-15 NB Ramps	16.3	C	16.0	C
Rancho Bernardo Rd. at W. Bernardo Dr.	30.5	D	26.6	D
Rancho Bernardo Rd. at I-15 SB Ramps	11.7	B	16.1	C
Rancho Bernardo Rd at I-15 NB Ramps	11.1	B	8.9	B

Note: Delay is in seconds and represents the average delay for all vehicles entering the intersection during the peak hour.

Phase II. Phase II would be the second development phase for all five planning areas on the SPA. This development phase would allow a total of 800 dwelling units as well as the proposed 9-hole golf course, clubhouse, and group care facility. Access for this phase would be provided to the east only. Circulation improvements proposed for this phase include an extension of the two-lane improvement of Camino del Norte easterly from the City/County boundary to the existing Camino del Norte interchange in the 4S Ranch SPA, and westerly as far as necessary for access, to the extent not completed during Phase I.

The phasing analysis for Phase II was performed under two scenarios: 1) assuming the construction of the 4S Business Park and proposed 4S Ranch Specific Plan does not occur within the Santa Fe Valley Phase II time frame, and 2) assuming one-third of the 4S Business Park and proposed 4S Ranch Specific Plan is built within the Santa Fe Valley Phase II time frame. The advantage of the second scenario is that access to Rancho

Bernardo Road would be easier for Santa Fe Valley residents: although the results of the two analyses are the same.

Under buildout of Phase II and surrounding traffic. Rancho Bernardo Road from West Bernardo Drive to I-15 would operate at LOS F; although Santa Fe Valley traffic would only contribute 1 percent to the traffic volumes. Rancho Bernardo Road, from I-15 to Bernardo Center Drive, would operate at LOS E; Santa Fe Valley traffic would only contribute 2 percent to the traffic volumes. Therefore, roadway operation impacts from Santa Fe Valley are not considered significant.

All intersections in the area would operate at acceptable levels of service (see Table 4.5-8) except Camino del Norte at the I-15 southbound ramps. This intersection would operate at LOS E (a.m. peak hour and p.m. peak hour); this is considered a significant impact of the project due to Santa Fe Valley's contribution to a poor traffic situation at this intersection.

Phase III. Phase III would consist of total buildout of all Planning Areas in the Santa Fe Valley SPA and all land uses would be in place, including the 1,200 dwelling units. The onsite circulation system required to support total project buildout is illustrated in Figure 4.5-7.

The impacts of Phase III are described earlier in this section under the subheadings Buildout Roadway Operation Analysis and Buildout Intersection Operation Analysis, and shown in Figures 4.5-6, 4.5-7, and 4.5-8.

Table 4.5-8

INTERSECTION LEVEL OF SERVICE PHASE II

Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Camino del Norte at Bernardo Center Drive	25.4	D	32.5	D
Camino del Norte at I-15 SB Ramps	**	E	**	E
Camino del Norte at I-15 NB Ramps	35.5	D	25.6	D
Rancho Bernardo Rd. at W. Bernardo Dr.	33.1	D	27.9	D
Rancho Bernardo Rd. at I-15 SB Ramps	11.7	B	16.2	C
Rancho Bernardo Rd at I-15 NB Ramps	11.0	B	9.2	B

Note: Delay is in seconds and represents the average delay for all vehicles entering the intersection during the peak hour.

** Delay cannot be computed because traffic on one or more approach movements exceeds capacity by more than 20 percent.

Phase I West. This phase is an alternative development scenario for the initial phase of Planning Areas II and III only. Access to the west would be provided via the proposed bridge access to Del Dios Highway. No connection to the east would be provided until the other phases are approved and easterly access improvements are made. The westerly access to Del Dios Highway would enable Planning Areas II and III to develop independently of or simultaneously with any of the other development phases without having to depend on access to the east.

With buildout of Phase I West along with surrounding area traffic, the LOS on Del Dios Highway would drop from LOS E to LOS F. Santa Fe Valley Phase I West would represent approximately 11 percent of the total traffic on this portion of Del Dios Highway, and would account for approximately 90 percent of the growth in the area if Phase I West occurred within the next 5 years. The LOS on Del Dios Highway is at LOS E today and would degenerate to LOS F with Santa Fe Valley and other surrounding development. This is considered a significant project impact.

Proposed Transit Service

An objective of the Specific Plan's Circulation Element is to provide convenient public transit access to a regional transit system to serve existing and planned development in Santa Fe Valley (County of San Diego 1995). As a condition of any discretionary permit, the County may require contributions to fund transit facility improvements to the satisfaction of the North County Transit District and Director of Public Works. The project is not expected to generate a significant demand for public transit (also see Section 4.7, Air Quality for public transit requirements).

4.5.3 Level of Significance

The development of Santa Fe Valley would generate traffic in an area that is already experiencing congested traffic circulation. Specifically, the project would result in significant impacts to the following roadways and intersections:

- Del Dios Highway from the project entrance to El Camino del Norte at the Phase I West development phase, and project buildout;
- Paseo Delicias between El Camino del Norte and Via de la Valle at project buildout;
- Camino del Norte between Bernardo Center Drive and I-15 at project buildout;
- Rancho Bernardo Road between West Bernardo Drive and I-15 at project buildout;
- the Camino del Norte southbound ramp to I-15 at the Phase II development phase; and
- the Camino del Norte northbound ramp to I-15 at project buildout.

Because widening of Del Dios Highway and Paseo Delicias to accommodate more traffic and improve the LOS is not consistent with the San Dieguito Community Plan, no mitigation is provided.

The other impacts can be mitigated by complying with the phased circulation improvement plan set forth in the Santa Fe Valley Circulation Element and the measures discussed in Section 4.5.4.

With the implementation of mitigation measures in Section 4.5.4. all impacts to traffic/ circulation will be mitigated.

4.5.4 Mitigation Measures

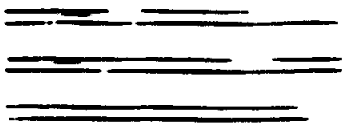
In addition to the proposed circulation improvements as part of the Santa Fe Valley phasing plan, the following transportation improvements are required to fully mitigate the traffic impacts of the proposed project:

- The Santa Fe Valley project proponents shall fund the construction of a southbound ramp lane at Camino del Norte to I-15 to the satisfaction of Caltrans at the Phase II development phase.

- The Santa Fe Valley project proponents shall contribute their fair share to fund traffic improvements on Rancho Bernardo Road between West Bernardo Drive and I-15 per the City of San Diego Facilities Financing Program. Fair share shall be based on the project's total 24-hour ADT as a percentage of the improvement costs.

- The Santa Fe Valley project shall contribute its fair share to fund a grade-separated interchange at Camino del Norte and Bernardo Center Drive per the City of San Diego's Facilities Financing Program. Fair share shall be based on the project's total 24-hour ADT as a proportion (percent) of the total cost of improvements.

- The Santa Fe Valley project shall contribute its fair share to fund interchange improvements at the Camino del Norte ramps at I-15 per the California Department of Transportation (Caltrans) Project Study Report (Caltrans 1992). These consist of improvements to the northbound offramp and southbound onramp to I-15 at Camino del Norte, and the eastbound lane at the I-15 underpass. Fair share shall be based on Santa Fe Valley's ADT contribution to the subject interchange as a proportion (percent) of the total cost of



4.6 NOISE

4.6.1 Existing Conditions

Noise is generally defined as unwanted or annoying sound that is typically associated with human activity and which interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance. The response of individuals to similar noise events is diverse and influenced by the type of noise, the perceived importance of the noise and its appropriateness in the setting, the time of day, the type of activity during which the noise occurs, and the sensitivity of the individual hearing the sound.

Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in units of decibels (dB). Most of the sounds we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies differing in sound level. The intensities of each frequency add to generate the sound we hear. The method commonly used to quantify environmental sounds consists of determining all of the frequencies of a sound according to a weighting system that reflects that human hearing is less sensitive at low and extremely high frequencies than at the midrange frequencies. This is called "A" weighting, and the decibel level measured is called the A-weighted sound level (or dBA). In practice, the level of a noise source is conveniently measured using a sound level meter that includes a filter corresponding to the dBA curve.

Although the A-weighted sound level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources that create a relatively steady background noise in which no particular source is identifiable. A single descriptor called the L_{eq} (equivalent sound level) is used. L_{eq} is the energy-mean A-weighted sound level during a measured time interval. It is the 'equivalent' constant sound level that would have to be produced by a given source to equal the fluctuating level measured.

Another sound measure known as the Community Noise Equivalence Level (or CNEL) is defined as the "A" weighted average sound level for a 24-hour day. It is calculated by adding a 5 decibel penalty to sound levels in the evening (7:00 p.m. to 10:00 p.m.), and a

10 decibel penalty to sound levels in the night (10:00 p.m. to 7:00 a.m.) to compensate for the increased sensitivity to noise during the quieter evening and nighttime hours. Typical reference sound levels and their associated environmental settings are shown in Figure 4.6-1. A Glossary of Standard Acoustical Terms is given at the end of this section.

Regulatory Setting

County of San Diego Noise Regulations

The County of San Diego Guidelines for residential development are summarized below:

1. Whenever possible, development in San Diego County should be planned and constructed so that noise sensitive areas are not subject to noise levels in excess of 55 dBA CNEL.

2. Whenever it appears that new development will result in any (existing or future) noise sensitive areas being subjected to noise levels of 60 dBA CNEL or greater, an acoustical study should be performed.

3. If the acoustical study shows that the noise levels at any noise sensitive areas will exceed 60 dBA CNEL, the development should not be approved unless the following findings are made:

   a) Modifications to the development have been or will be made that reduces the exterior noise level below 60 dBA CNEL or,

   b) If with current noise abatement technology, it is in feasible to reduce the exterior CNEL to 60 dBA or below, then modifications to the development have been or will be made that reduce interior noise below CNEL equal to 45 dBA. Particular attention shall be given to noise sensitive spaces, such as bedrooms and,

   c) If finding "b" above is made, a further finding is made that there are specifically identified overriding social or economic considerations that warrant approval of the development without modification as described in "a" above.

NOISE SOURCE (AT A GIVEN DISTANCE)	SCALE OF A-WEIGHTED SOUND LEVEL IN DECIBELS	COMPARABLE NOISE ENVIRONMENT	HUMAN JUDGEMENT OF NOISE LOUDNESS (RELATIVE TO A REFERENCE LOUDNESS OF 70 DECIBLES*)
	140		
Military Jet Take-off with After-burner (50 ft)			
Civil Defense Siren (100 ft)	130	Carrier Flight Deck	
			THRESHOLD OF PAIN
Commercial Jet Take-off (200 ft)	120		* 32 times as loud
	110	Rock Music Concert	* 16 times as loud
Pile Driver (50 ft)			
Ambulance Siren (100 ft)	100		VERY LOUD
Newspaper Press (5 ft)			* 8 times as loud
Power Lawn Mower (3 ft)			
Motorcycle (25 ft)	90	Boiler Room	* 4 times as loud
Propeller Plane Flyover (1000 ft)		Printing Press Plant	
Diesel Truck, 40 mph (25 ft)			
Garbage Disposal (3 ft)	80	High Urban Ambient Sound	* 2 times as loud
Passenger Car, 65 mph (25 ft)			
Living Room Stereo (15 ft)			
Vacuum Cleaner (3 ft)	70		MODERATELY LOUD
Electronic Typewriter (10 ft)			* 70 dB (Reference Loudness)
Normal Conversation (5 ft)	60	Data Processing Center	* 1/2 as loud
Air Conditioning Unit (100 ft)		Department Store	
Light Traffic (100 ft)	50	Private Business Office	* 1/4 as loud
Bird Calls (distant)			QUIET
	40	Lower Limit of Urban Ambient Sound	* 1/8 as loud
Soft Whisper (5 ft)	30	Quiet Bedroom	
	20	Recording Studio	JUST AUDIBLE
	10		THRESHOLD OF HEARING
	0		

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Sound Levels of Typical Noise Sources and Comparable Noise Environments (A-Weighted Sound Levels)

FIGURE 4.6-1

4. If the acoustical study shows that noise levels at any noise sensitive areas will exceed 75 dBA CNEL, the development should not be approved.

5. Interior noise levels should not exceed 45 dBA CNEL within the habitable space of any residential unit.

The County does not have exterior noise standards for schools but interior noise levels should not exceed a one-hour average of 50 dBA within any room. The State of California Office of Noise Control considers sound levels up to 65 dBA CNEL to be compatible with school uses.

The County does not consider land uses such as golf courses to be a noise sensitive use. However, the State of California Office of Noise Control considers sound levels up to 75 dBA CNEL to be compatible with those uses. Mitigation within buildings such as a clubhouse should be considered in areas where the sound level exceeds 70 dBA CNEL.

Fixed source and/or operational noise is governed by County Ordinance section 36.404. The applicable sound levels are a function of the time of day and the land use zone. Sound levels are measured at the boundary of the property of the noise source. The relevant limits are given in Table 4.6-1.

Construction noise is governed by the County Ordinance section 36.410. The relevant parts are cited below.

(a) It shall be unlawful for any person, including the County of San Diego, to operate construction equipment at any construction site on Sundays, ... In addition, it shall be unlawful for any person to operate construction equipment at any construction site on Mondays through Saturdays, except between the hours of 7 a.m. and 7 p.m.

(b) No such equipment, or combination of equipment regardless of age or date or acquisition, shall be operated so as to cause noise at a level in excess of seventy-five (75) decibels for more than eight hours during any twenty-four (24) hour period when measured at or within property lines of any property which is developed and used either in part or in whole for residential purposes.

Table 4.6-1

COUNTY OF SAN DIEGO NOISE ORDINANCE LIMITS

Land Use Zone	Time of Day	1 Hour Average Sound Level in dBA
R-S, R-D, R-R, R-MH, A-70, A-72, S-80, S-81, S-87, S-88, S-90, S-92, R-V, and R-U	7 a.m. to 10 p.m. 10 p.m. to 7 a.m.	50 45
R-R0, R-C, R-M, C-30, S-86, R-V, and R-U	7 a.m. to 10 p.m. 10 p.m. to 7 a.m.	55 50
S-94 and other commercial zones	7 a.m. to 10 p.m. 10 p.m. to 7 a.m.	60 55
M-50, M-52, and M-54	any time	70
S-82, M-58	any time	70

* Includes areas with a density of eleven dwellings or less per acre.

Source: County of San Diego Noise Ordinance section 36.404.

State of California

The California Code of Regulations, Title 24, Noise Insulation Standards (CCR Title 24) requires that the interior noise level of all new multi-family residences be 45 dBA CNEL or below. If the exterior sound level is greater than 60 dBA CNEL, Title 24 requires the preparation of an acoustical analysis showing that the proposed design will limit interior noise to less than 45 dBA CNEL.

Wildlife Habitat Regulations

Construction and operational noise is regulated by the United States Fish and Wildlife Service and the California Department of Fish and Game for its effect on two endangered bird species: least Bell's vireo and the California gnatcatcher. Riparian vegetation is a potential habitat to the least Bell's vireo, while coastal sage scrub is habitat for the California gnatcatcher.

Resource agencies have theorized that elevated noise levels can potentially mask songs of the least Bell's vireo and California gnatcatcher which are used to attract mates and defend territories. The San Diego Association of Governments (SANDAG) in a 1990 study (Comprehensive Species Management Plan for the least Bell's vireo) theoretically estimated that noise levels above 60 dBA L_{eq} in vireo breeding areas may sufficiently mask the vireo's song and potentially reduce the reproductive success of this species during their breeding season that occurs from March 15th to September 15th. The SANDAG report conclusions were unclear as to the specific time interval of the L_{eq} measurement. Although research is on-going regarding similar noise impacts to the California gnatcatcher, in the absence of species-specific data, these same study results are applied to this bird species as well.

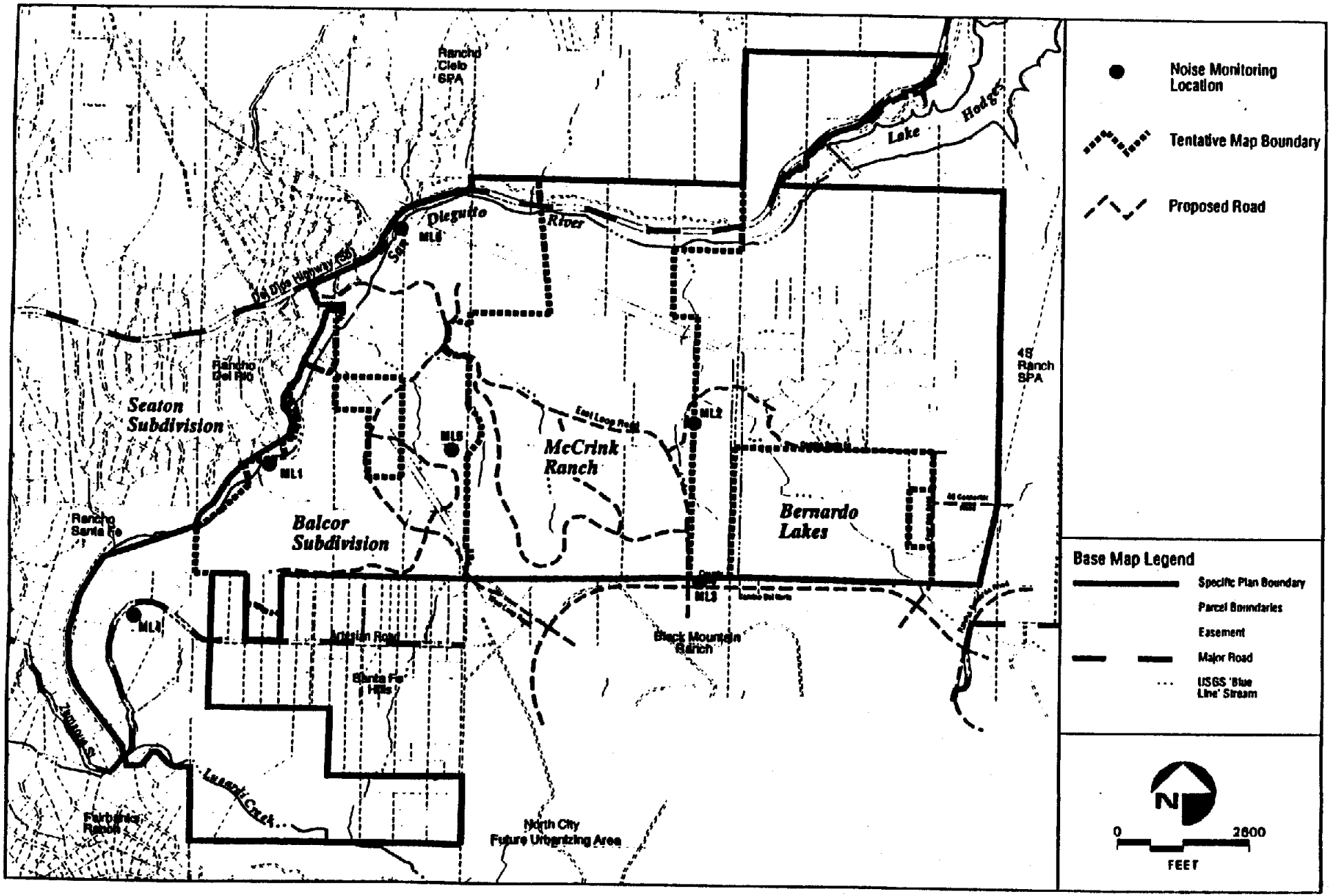
Existing Site Conditions

Noise sensitive receptors are land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise. They often include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, educational facilities, and libraries. Although the majority of the project area is undeveloped, there are noise sensitive land uses in the vicinity of the project alignment. These land uses include the existing homes along the southern edge of Artesian Road (a principally unpaved southerly access route) and Zumaque Street (a paved access road to the southwest of the project area), as well as homes to the north and west of the San Dieguito River and sensitive habitat areas near the San Dieguito River and Lusardi Creek area.

Apparatus and Procedure

In order to ascertain the existing noise environment present in the vicinity of the project, noise monitoring was performed along existing paved and unpaved access roads which are included in the project design, known sensitive habitat area, and in the project area itself.

Six locations were selected for a series of 1- hour sound measurements during day time hours (8:00 a.m. to 5:00 p.m.) at each of the monitoring locations. The sound levels are considered typical of the noise environment on any given day. The monitoring locations, labeled ML 1 through ML 6 are shown graphically in Figure 4.6-2.



4.6-7

OGDEN

Noise Monitoring Locations ML 1 - 6

FIGURE

4.6-2

A Larson Davis Model 700 ANSI Type 2 Integrating Sound Level Meter was used as the data collection device. The meter was mounted on a tripod approximately 5 feet above the ground in order to simulate the average height of the human ear. The measurements were performed on March 30, 1995. The sound level meter was calibrated before and after each set of measurements. All sound measurement equipment was within the valid manufacturers calibration period.

Ambient Sound Measurement Results

The results of the 1- hour sound level monitoring are shown in Table 4.6-2. The values for the L_{eq}, L_{max}, and L_{min}, as well as the statistical indicators L_{10}, L_{50}, and L_{90}, are given for each monitoring location. Average testing conditions at the sites were sunny with a wind speed of 3-5 miles-per-hour and an approximate temperature of 76 degrees Fahrenheit. Measurements collected at monitoring locations ML 1 through ML 6 reflect typical sound levels associated with the community setting observed and the topography of the surrounding terrain. Individual peculiarities of the sites are addressed below:

ML 1: Sensitive habitat area along San Dieguito River

Monitoring Location 1 was along the eastern bank of the San Dieguito river. Due to the overflow conditions present at Lake Hodges Dam, the water level was elevated more than usual. Several homes were observed to lie along the western edge of the river with a typical lot elevation of approximately 50-75 feet above the water. The meter was positioned approximately 10 feet from the waters edge. Audible sounds in this area were primarily from wind blowing through the vegetation and eucalyptus canopy along the river, birds calling, water flowing in the river, and to a slight extent aircraft distant aircraft noise. The integrated sound levels, as evidenced by the L_{eq}, L_{10}, L_{50}, and L_{90}, indicated a serene environment with a deviation of the L_{eq} level from the L_{90} of only 4 dBA. The minimum instantaneous RMS sound level (L_{min}) of 44.5 dBA showed an acoustic floor of only 6 dBA less than the equivalent level. Maximum sound levels seen at the site were caused by periodic aircraft noise.

Table 4.6-2

MEASURED AMBIENT NOISE LEVELS AT THE SANTA FE VALLEY SITE

Site	Start Time / Date	1-Hour Noise Level Descriptors (in dBA)					
		L_{eq}	L_{max}	L_{min}	L_{10}	L_{50}	L_{90}
ML 1	8:45 a.m./3-30-95	50.4	68.0	44.5	52.0	48.0	46.0
ML 2	10:30 a.m./3-30-95	55.6	77.0	39.5	56.5	44.0	41.0
ML 3	12:15 p.m./3-30-95	57.5	82.5	33.0	56.0	40.0	34.5
ML 4	1:15 p.m./3-30-95	60.4	80.0	37.5	61.5	54.0	46.5
ML 5	2:30 p.m./3-30-95	41.7	61.5	33.5	44.5	37.5	34.5
ML 6	3:40 p.m./3-30-95	70.9	81.0	49.0	74.5	69.0	56.5

Monitoring Locations:

- ML 1: Sensitive habitat area along San Dieguito River. Meter facing at 340 degrees azimuth at water periphery.
- ML 2: Near McCrink Ranch citrus packing area. Meter facing at 5 degrees azimuth approximately 100 feet from current site access road. Hourly traffic counts of: 1 automobile, 2 medium vehicles, 2 large trucks.
- ML 3: Along south side of Artesian Road. Meter approximately 300 feet from McCrink Ranch turnoff and facing at 350 degrees azimuth. Meter approximately 50 feet from road centerline. Hourly traffic counts of: 14 automobiles, 3 medium vehicles, 2 large trucks.
- ML 4: 8400 Block of Artesian Road. Meter on SE corner and facing at 315 degrees azimuth. Meter approximately 30 feet from roadway centerline. Hourly traffic counts of: 8 automobiles, 1 medium vehicle, 2 large trucks.
- ML 5: Hill overlooking valley. Meter facing at 30 degrees azimuth.
- ML 6: Del Dios Highway near locked gate. Meter approximately 100 feet from roadway centerline and facing at 300 degrees azimuth. Hourly traffic counts of: 1,428 automobiles, 21 medium vehicles, 10 large trucks.

Measurements were 1 hour in duration.

ML 2: Near McCrink Ranch packing area

Monitoring Location 2 was taken near the northwest corner of the McCrink citrus packing facility approximately 100 feet from the existing access road. To the immediate south of the meter (at a distance of approximately 200 feet) was a small diesel generator powering an electric pond pump. The meter was positioned near the roadway facing roughly towards the dirt road intersection in front of the packing facility. Audible sounds in this area were from aircraft overflights, birds, wind in vegetation, and the generator to the south. Some conversation at the packing plant was audible at the meters location. Traffic counts along the access roads showed and hourly count of 1 automobile, 2 medium vehicles, and

2 trucks: all with an average speed of 5-15 miles per hour. It was also observed during the monitoring hour that a tractor passed the meter location 3 times. The acoustic floor for this site was 39.5 dBA. Maximum sound levels were as a result of the 2 large trucks passing the site.

ML 3: South side of Artesian Road approximately 300 feet from McCrink Ranch turnoff

Monitoring Location 3 was taken along the south side of Artesian Road approximately 300 feet from the McCrink Ranch turnoff. The meter was approximately 50 feet from the centerline of Artesian Road. The meter was placed facing the road with the meter having a clear "view" of the road in either direction. Audible sounds in this area included noise from passing cars, wind in vegetation, birds calling, and two helicopter passes of approximately 2 minutes in duration each. Traffic counts during the measurement hour showed 18 automobiles, 3 medium vehicles, and 3 large trucks passing the site. The acoustic floor for this site was 33.0 dBA giving an indication of its rural location. Maximum sound levels were caused by the helicopter events and intermittent traffic present.

ML 4: 8400 Block of Artesian Road

Monitoring Location 4 was along the 8400 block of Artesian Road. The meter was on top of an existing water diversion structure located slightly above ground level. The meter was placed facing the inside of the bend in Artesian Road. Audible sounds in this area were primarily a result of transient automobile traffic, distant aircraft noise, and infrequent wind gusts of approximately 12 miles-per-hour. The integrated sound levels show values which are typical for this type of environment. The acoustic floor at this site was 37.5 dBA owing entirely to its rural location. Maximum sound levels were a result of a garbage truck passing the site twice.

ML 5: Hill overlooking Santa Fe Valley to northeast

Monitoring Location 5 was taken on a hill overlooking most of the Santa Fe Valley in order to quantify sound levels within the proposed project site. The meter was placed in such a manner as to have maximum exposure to any detectable noises present in the valley. Audible sounds in this area included crickets chirping, wind in vegetation, distant aircraft activity, and a rooster crowing at a nearby ranch. Even though Del Dios Highway was visible at this location (approximately 1.25 miles away), atmospheric conditions were such as to make it inaudible. The integrated sound levels were quite low verifying that the Santa Fe Valley area is predominantly a rural noise environment. The acoustic floor for the site

.was 33.5 dBA and would be characteristic of most areas in the valley. Maximum sound levels seen at the site probably caused by operator activities near the site.

ML 6: Del Dios Highway near locked gate (Evening Peak Hour)

Monitoring Location 6 was taken near the locked access gate near Del Dios Highway. A small fruit stand was situated to the east of the test site and several homes were located across the highway to the north. These homes were elevated and/or obscured from the direct line-of-sight of the highway. The meter was placed along the southern edge of the roadway. Audible sounds in this area were primarily from traffic noise along Del Dios Highway. The integrated sound levels had a wide variance and are typical of the random nature of traffic noise. A minimum instantaneous RMS sound level (L_{min}) of 49.0 dBA was the acoustic floor for this location. The maximum sound level of 81 dBA seen at this site was also caused by the automobile traffic. The observed traffic mix at this location for the measuring period was seen to consist of 1,428 automobiles (including motorcycles), 21 medium sized vehicles, and 10 large trucks (including busses).

Existing Roadway Noise Levels

Existing roadway noise contours were generated using the Caltrans Sound-32 Traffic Noise prediction model based on the Federal Highway Administrations FHWA-RD-77-108 report. Current traffic data which included traffic volume, speed, and mix for the three major roads servicing the Santa Fe Valley site were provided to the model (Kimley-Horn 1995). The following roads were selected: Camino Del Norte, Del Dios Highway, and Rancho Bernardo Road. The posted vehicle speed was used for the various roadway segments. No topographic considerations were taken (i.e., interference from buildings, hills, etc.). The results showing the distance to the 60, 65, 70, and 75 dBA contours for both hard site attenuation (or 3.0 dBA loss per doubling of distance from source to receiver which is typically applied to hard packed or paved areas) and soft site attenuation (or 4.5 dBA loss per doubling of distance which is typically applied to loosely packed or grassy areas) are presented in Table 4.6-3.

4.6.2 Specific Plan Area Impacts

The primary noise source throughout the project area at full build-out would be vehicular traffic. The degree of the impact would depend on the location of the noise sensitive receptors in relation to those roadways, traffic volumes, and the project design.

Table 4.6-3

EXISTING ROADWAY CNEL CONTOURS

Roadway Segment	ADT	Average Vehicle Speed	Perpendicular Distance to Contour from Road Centerline in feet							
			Hard Site Propagation				Soft Site Propagation			
			75 CNEL	70 CNEL	65 CNEL	60 CNEL	75 CNEL	70 CNEL	65 CNEL	60 CNEL
Camino Del Norte										
Camino San Bernardo to Bernardo Center Drive	1,200	50	*	*	*	60	*	*	*	*
Bernardo Center Drive to Interstate 15	22,092	55	*	145	455	1,440	*	85	180	400
Interstate 15 to Carmel Mountain Road	31,700	50	50	165	525	1,655	*	90	200	435
Del Dios Highway										
Calle Ambiente to Via Rancho Parkway	16,800	55	*	110	345	1,095	*	70	150	330
Via Rancho Parkway to Citracado Parkway	16,200	55	*	110	340	1,070	*	80	180	390
Rancho Bernardo Road										
Camino San Bernardo to W. Bernardo Road	15,400	50	*	80	255	810	*	60	120	270
W. Bernardo Road to Interstate 15	38,300	50	65	205	645	2,035	50	110	230	500
Interstate 15 to Bernardo Center Drive	34,700	45	*	145	455	1,440	*	80	180	390

*: Indicates that noise contour is coincident with traffic right-of-way.

Hard site attenuation taken as 3.0 dBA loss per doubling of distance from source to receiver. Soft site attenuation taken as 4.5 dBA loss per doubling of distance from source to receiver.

Calculated using a vehicle mix of 96% Cars, 2% Medium Trucks, 2% Heavy Trucks.

Traffic Data Source: Kimley-Horn Inc. 1995

The future noise environment along proposed onsite roadways and offsite roadways that access the project area from Interstate 15, was estimated using the Caltrans Sound 32 Traffic Noise Prediction Model with California noise emission factors. The model input consisted of a digitized representation of the roadway alignments, the proposed traffic volumes, vehicle mix, and average vehicle speed. The model input also included pad and roadway topography when available. For onsite roadways where pad elevations and topography are not available and for offsite roadways, noise contours were calculated without topographic considerations as described for the noise modeling of existing conditions. The receiver elevation was placed at 5 feet above the ground elevation to estimate the average height of a human ear. All calculations assumed "hard" site sound propagation characteristics. Roadway parameters used for the modeling effort are presented in Table 4.6-4. Only roadways which are projected to have a sufficient traffic volume to generate a 60 dBA CNEL noise contour or greater are identified in the table. The modeling results are depicted in Figures 4.6-3 through 4.6-5. A discussion of specific noise impacts are presented in the following sections.

Offsite Noise Impacts

Increases in offsite noise levels along major roadways would be realized as regional traffic volumes increase from projected area growth and roadway segments are widened to accommodate the increased traffic. Additional noise impacts are anticipated when existing roadways are realigned in accordance with planned or proposed circulation element improvements.

Noise generated by project-related traffic may increase the noise levels at existing sensitive receptors located along the offsite roadways linking the project site to Interstate 15 and future SR56. The degree of an impact at receptors is dependent on such factors as roadway design, ADT, distance from the roadway, the orientation of the usable outdoor living areas to the roadway, and intervening topography. In general, a doubling of the traffic volume would be expected to increase the sound level by 3 dBA. This is considered significant if usable outdoor living areas such as balconies, patios, children's playing areas, and swimming pools are affected.

Table 4.6-5 identifies the approximate calculated CNEL at 100 feet from the centerline from Camino Del Norte, Rancho Bernardo Road, Del Dios Highway, Camino Ruiz, and Black

Table 4.6-4

SOUND 32 ROADWAY MODELING PARAMETERS

Roadway Segment Modeled	ADT	Average Vehicle Speed	Percent Cars	Percent Medium Trucks	Percent Heavy Trucks
Balcor:					
Balcor Upper West Loop Road	5,100	40	98	1	1
Balcor Lower West Loop Road	2,900	40	98	1	1
Bernardo Lakes:					
Bernardo Four Gee Road	3,700	40	96	2	2
McCrink Ranch:					
McCrink East Loop Road	8,800	40	98	1	1
McCrink West Loop Road Connector	2,900	40	98	1	1
Del Dios Highway:					
Calle Ambeinte to Via Rancho Parkway	16,800	55	96	2	2
Via Rancho Parkway to Citracado Parkway	16,400	55	96	2	2
Camino Del Norte:					
Site Access A to Site Access B	5,500	45	96	2	2
Site Access B to Site Access C	11,700	45	96	2	2
Site Access C to Site Access D	11,500	45	96	2	2
Site Access D to Site Access E	12,300	45	96	2	2
Site Access E to Rancho Bernardo Road	31,600	55	96	2	2
Rancho Bernardo Road to Black Mountain Road	26,900	55	96	2	2
Black Mountain Road to Camino San Bernardo	41,700	55	96	2	2
Camino San Bernardo to Bernardo Center Drive	54,900	55	96	2	2
Bernardo Center Drive to I-15	59,600	55	96	2	2

Table 4.6-4 (Continued)

SOUND 32 ROADWAY MODELING PARAMETERS

Roadway Segment Modeled	ADT	Average Vehicle Speed	Percent Cars	Percent Medium Trucks	Percent Heavy Trucks
Rancho Bernardo Road:					
Camino Del Norte to Black Mountain Road	4,500	40	96	2	2
Black Mountain Road to Camino San Bernardo	20,700	40	96	2	2
Camino San Bernardo to West Bernardo Road	26,400	40	96	2	2
West Bernardo Road to I-15	45,900	40	96	2	2
Black Mountain Road:					
Camino Del Norte to Carmel Valley Road	23,300	40	96	2	2
Carmel Valley Road to Carmel Mountain Road	22,900	40	96	2	2
South of Carmel Mountain Road	19,900	40	96	2	2
Camino Ruiz:					
Camino Del Norte to Resort Street	7,600	40	96	2	2
Resort Street to San Dieguito Road	13,800	40	96	2	2
San Dieguito Road to Carmel Valley Road	19,000	40	96	2	2
Carmel Valley Road to SR56	36,700	40	96	2	2

Traffic volume, speed, and mix provided by Kimley-Horn and Associates, Inc., 1995

Mountain Road for the project and no project condition and at full buildout of the surrounding area (approximately year 2015). The calculations illustrate that, with the exception of the Camino Del Norte access roads, sound levels would exceed 60 dBA CNEL in the surrounding area regardless if the Santa Fe Valley project were built. The project's incremental contribution to the noise environment along the offsite roadways ranges from 0 to 1 dBA. This insignificant contribution is a direct result of the distribution of the project's 22,060 estimated trips throughout the surrounding roadway systems. Table 4.6-5 also shows the percentage contribution of ADTs generated by the project (see Section 4.5, Traffic/Circulation).

No existing residences are located along the Camino Del Norte access roadways so there would be no significant noise impacts to existing residences along the roadway. No significant offsite vehicular traffic noise impacts are expected as a result of the project's small contribution to the overall noise environment.

Onsite Noise Impacts

Wildlife

As described in Section 4.6.1, noise can have an adverse affect on some sensitive wildlife species such as the California gnatcatcher. Noise levels within the coastal sage scrub onsite, which is habitat for the California gnatcatcher, was identified within the 60 dBA CNEL contour along the San Dieguito River Valley area adjacent to Del Dios Highway (McCrink Ranch Figure 4.6-5). Existing and projected sound levels as high as 70 dBA CNEL were calculated. This impact is created by the regional increase in traffic volumes as a result of area growth projected to occur within the next 15 years. The Santa Fe Valley project's contribution to the noise level along Del Dios Highway is expected to be less than 1 dBA. Thus, the project related noise impact is not considered to be significant.

Proposed Schools

Two proposed school sites, a middle school proposed along Four Gee Road on the eastern edge of the Bernardo Lakes tentative map area, and an elementary school proposed at the northeast corner of Four Gee Road and 4S Connector Road may be affected by noise. Since grading plans for the school sites are not available at this time, noise calculations were performed assuming that the school sites will be on-grade with the adjacent

(which is less than 1 percent); thus, this impact is not considered a significant impact of the project. All intersections in the area would operate at acceptable levels of service (see Table 4.5-7).

Table 4.5-7

INTERSECTION LEVEL OF SERVICE PHASE I EAST

Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Camino del Norte at Bernardo Center Drive	23.6	C	31.7	D
Camino del Norte at I-15 SB Ramps	21.9	C	17.6	C
Camino del Norte at I-15 NB Ramps	16.3	C	16.0	C
Rancho Bernardo Rd. at W. Bernardo Dr.	30.5	D	26.6	D
Rancho Bernardo Rd. at I-15 SB Ramps	11.7	B	16.1	C
Rancho Bernardo Rd at I-15 NB Ramps	11.1	B	8.9	B

Note: Delay is in seconds and represents the average delay for all vehicles entering the intersection during the peak hour.

Phase II. Phase II would be the second development phase for all five planning areas on the SPA. This development phase would allow a total of 800 dwelling units as well as the proposed 9-hole golf course, clubhouse, and group care facility. Access for this phase would be provided to the east only. Circulation improvements proposed for this phase include an extension of the two-lane improvement of Camino del Norte easterly from the City/County boundary to the existing Camino del Norte interchange in the 4S Ranch SPA, and westerly as far as necessary for access, to the extent not completed during Phase I.

The phasing analysis for Phase II was performed under two scenarios: 1) assuming the construction of the 4S Business Park and proposed 4S Ranch Specific Plan does not occur within the Santa Fe Valley Phase II time frame, and 2) assuming one-third of the 4S Business Park and proposed 4S Ranch Specific Plan is built within the Santa Fe Valley Phase II time frame. The advantage of the second scenario is that access to Rancho

Bernardo Road would be easier for Santa Fe Valley residents: although the results of the two analyses are the same.

Under buildout of Phase II and surrounding traffic. Rancho Bernardo Road from West Bernardo Drive to I-15 would operate at LOS F: although Santa Fe Valley traffic would only contribute 1 percent to the traffic volumes. Rancho Bernardo Road, from I-15 to Bernardo Center Drive, would operate at LOS E: Santa Fe Valley traffic would only contribute 2 percent to the traffic volumes. Therefore, roadway operation impacts from Santa Fe Valley are not considered significant.

All intersections in the area would operate at acceptable levels of service (see Table 4.5-8) except Camino del Norte at the I-15 southbound ramps. This intersection would operate at LOS E (a.m. peak hour and p.m. peak hour); this is considered a significant impact of the project due to Santa Fe Valley's contribution to a poor traffic situation at this intersection.

Phase III. Phase III would consist of total buildout of all Planning Areas in the Santa Fe Valley SPA and all land uses would be in place, including the 1,200 dwelling units. The onsite circulation system required to support total project buildout is illustrated in Figure 4.5-7.

The impacts of Phase III are described earlier in this section under the subheadings Buildout Roadway Operation Analysis and Buildout Intersection Operation Analysis, and shown in Figures 4.5-6, 4.5-7, and 4.5-8.

Table 4.5-8

INTERSECTION LEVEL OF SERVICE PHASE II

Intersection	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Camino del Norte at Bernardo Center Drive	25.4	D	32.5	D
Camino del Norte at I-15 SB Ramps	**	E	**	E
Camino del Norte at I-15 NB Ramps	35.5	D	25.6	D
Rancho Bernardo Rd. at W. Bernardo Dr.	33.1	D	27.9	D
Rancho Bernardo Rd. at I-15 SB Ramps	11.7	B	16.2	C
Rancho Bernardo Rd at I-15 NB Ramps	11.0	B	9.2	B

Note: Delay is in seconds and represents the average delay for all vehicles entering the intersection during the peak hour.

** Delay cannot be computed because traffic on one or more approach movements exceeds capacity by more than 20 percent.

Phase I West. This phase is an alternative development scenario for the initial phase of Planning Areas II and III only. Access to the west would be provided via the proposed bridge access to Del Dios Highway. No connection to the east would be provided until the other phases are approved and easterly access improvements are made. The westerly access to Del Dios Highway would enable Planning Areas II and III to develop independently of or simultaneously with any of the other development phases without having to depend on access to the east.

With buildout of Phase I West along with surrounding area traffic, the LOS on Del Dios Highway would drop from LOS E to LOS F. Santa Fe Valley Phase I West would represent approximately 11 percent of the total traffic on this portion of Del Dios Highway, and would account for approximately 90 percent of the growth in the area if Phase I West occurred within the next 5 years. The LOS on Del Dios Highway is at LOS E today and would degenerate to LOS F with Santa Fe Valley and other surrounding development. This is considered a significant project impact.

Proposed Transit Service

An objective of the Specific Plan's Circulation Element is to provide convenient public transit access to a regional transit system to serve existing and planned development in Santa Fe Valley (County of San Diego 1995). As a condition of any discretionary permit, the County may require contributions to fund transit facility improvements to the satisfaction of the North County Transit District and Director of Public Works. The project is not expected to generate a significant demand for public transit (also see Section 4.7, Air Quality for public transit requirements).

4.5.3 Level of Significance

The development of Santa Fe Valley would generate traffic in an area that is already experiencing congested traffic circulation. Specifically, the project would result in significant impacts to the following roadways and intersections:

- Del Dios Highway from the project entrance to El Camino del Norte at the Phase I West development phase, and project buildout;
- Paseo Delicias between El Camino del Norte and Via de la Valle at project buildout;
- Camino del Norte between Bernardo Center Drive and I-15 at project buildout;
- Rancho Bernardo Road between West Bernardo Drive and I-15 at project buildout;
- the Camino del Norte southbound ramp to I-15 at the Phase II development phase; and
- the Camino del Norte northbound ramp to I-15 at project buildout.

Because widening of Del Dios Highway and Paseo Delicias to accommodate more traffic and improve the LOS is not consistent with the San Dieguito Community Plan, no mitigation is provided.

The other impacts can be mitigated by complying with the phased circulation improvement plan set forth in the Santa Fe Valley Circulation Element and the measures discussed in Section 4.5.4.

With the implementation of mitigation measures in Section 4.5.4. all impacts to traffic/ circulation will be mitigated.

4.5.4 Mitigation Measures

In addition to the proposed circulation improvements as part of the Santa Fe Valley phasing plan. the following transportation improvements are required to fully mitigate the traffic impacts of the proposed project:

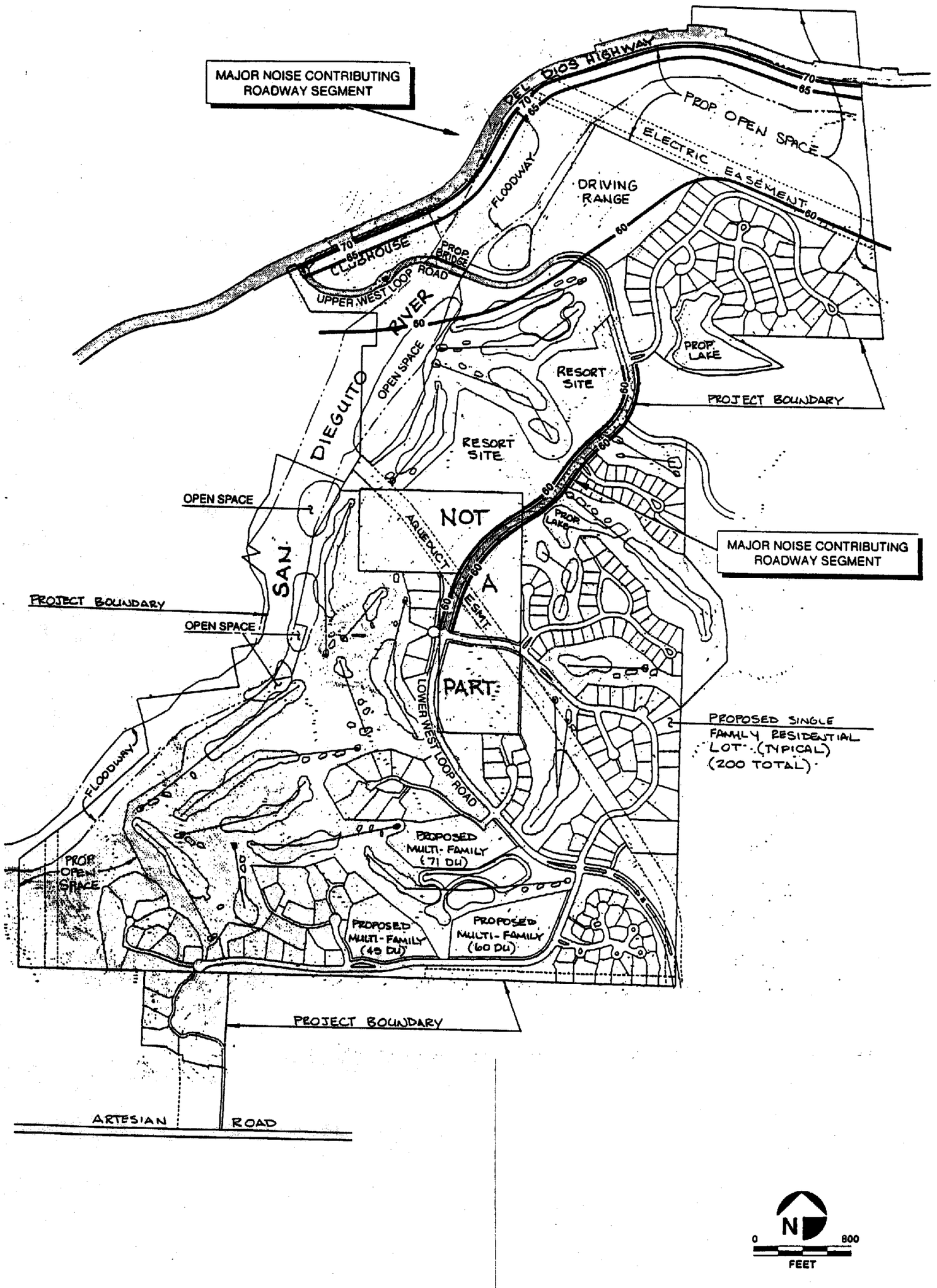
- The Santa Fe Valley project proponents shall fund the construction of a southbound ramp lane at Camino del Norte to I-15 to the satisfaction of Caltrans at the Phase II development phase.

- The Santa Fe Valley project proponents shall contribute their fair share to fund traffic improvements on Rancho Bernardo Road between West Bernardo Drive and I-15 per the City of San Diego Facilities Financing Program. Fair share shall be based on the project's total 24-hour ADT as a percentage of the improvement costs.

- The Santa Fe Valley project shall contribute its fair share to fund a grade-separated interchange at Camino del Norte and Bernardo Center Drive per the City of San Diego's Facilities Financing Program. Fair share shall be based on the project's total 24-hour ADT as a proportion (percent) of the total cost of improvements.

- The Santa Fe Valley project shall contribute its fair share to fund interchange improvements at the Camino del Norte ramps at I-15 per the California Department of Transportation (Caltrans) Project Study Report (Caltrans 1992). These consist of improvements to the northbound offramp and southbound onramp to I-15 at Camino del Norte, and the eastbound lane at the I-15 underpass. Fair share shall be based on Santa Fe Valley's ADT contribution to the subject interchange as a proportion (percent) of the total cost of

improvements. If the southbound ramp lane to I-15 funded at Phase II is considered by the City and Caltrans as Santa Fe Valley's fair share contribution to this interchange. no further funding contribution shall be required.



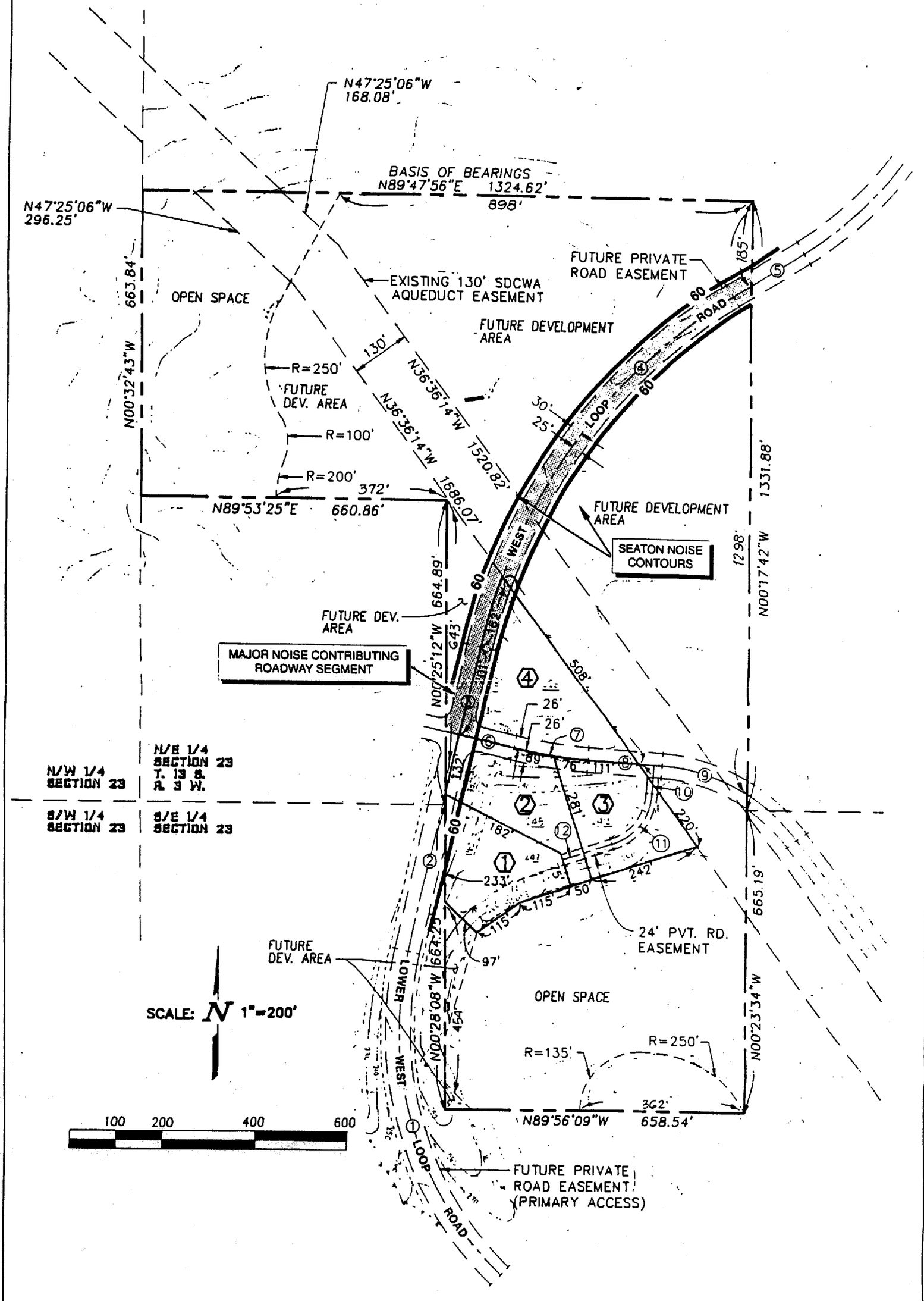
SOURCE: O'Neil Engineering, 5/6/95

NOTE: ALL CONTOURS GIVEN IN A-WEIGHTED DECIBELS.

OGDEN

Community Noise Equivalence Level Contours
Balcor Subdivision

FIGURE
4.6-3

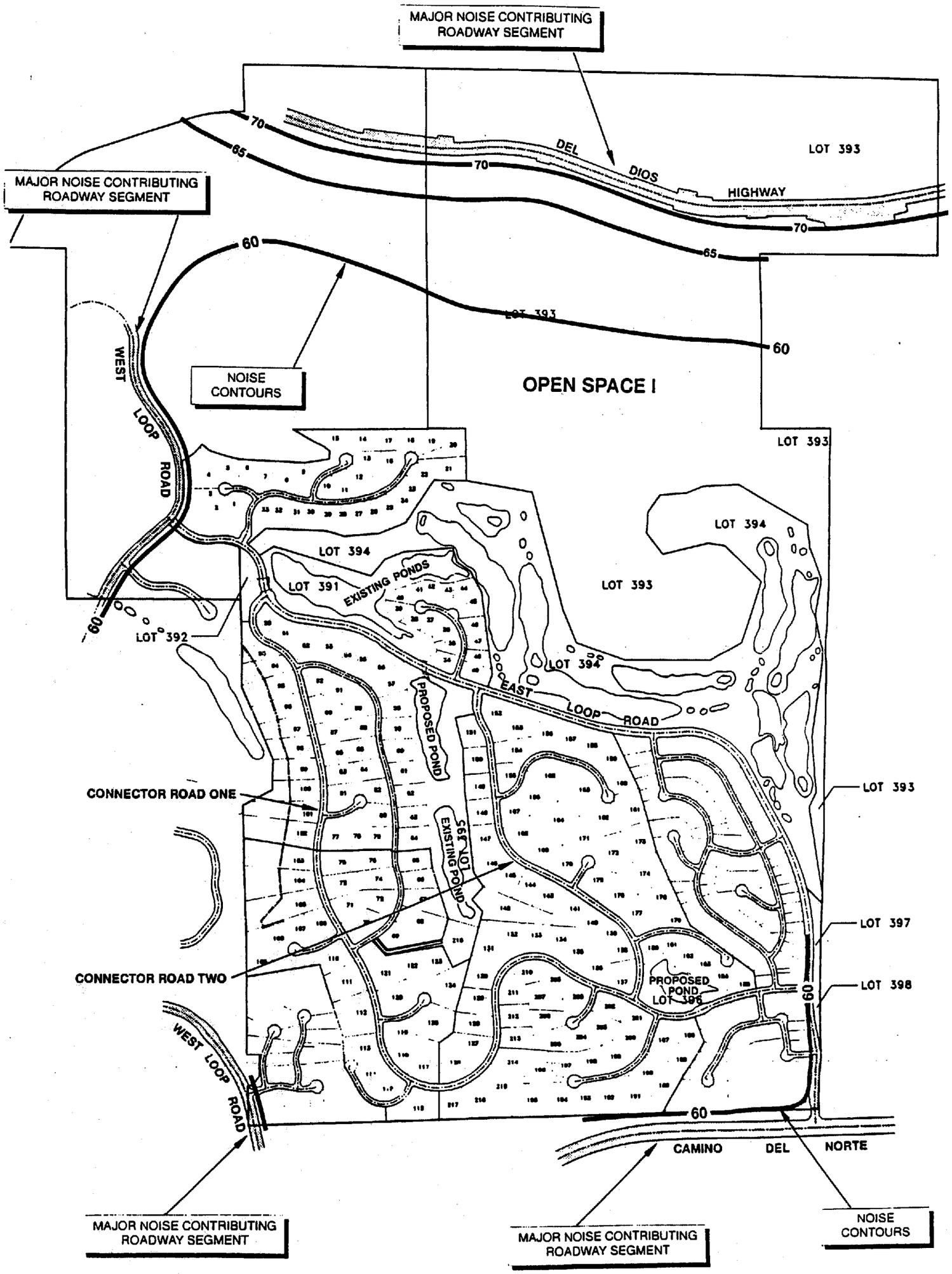


NOTE: ALL CONTOURS GIVEN IN A-WEIGHTED DECIBELS.

OGDEN

Community Noise Equivalence Level Contours:
Seaton Subdivision

FIGURE
4.6-4



NOTE: ALL CONTOURS GIVEN IN A-WEIGHTED DECIBELS.

OGDEN

Community Noise Equivalence Level Contours
McCrink Subdivision

FIGURE
4.6-5

Table 4.6-5

PROJECTED ADT AND NOISE LEVELS ON OFFSITE ROADWAYS

Roadway	Projected ADT	Santa Fe Valley SPA Contribution to Projected ADT	Calculated CNEL at 100 feet from Centerline (with project)	Calculated CNEL at 100 feet from Centerline (without project)
Del Dios Highway:				
Calle Ambeinte to Via Rancho Parkway	16,800	10%	70	70
Via Rancho Parkway to Citracado Parkway	16,400	9%	70	70
Camino Del Norte:				
Site Access A to Site Access B	5,500	52%	64	60
Site Access B to Site Access C	11,700	77%	67	60
Site Access C to Site Access D	11,500	77%	67	60
Site Access D to Site Access E	12,300	78%	67	60
Site Access E to Rancho Bernardo Road	31,600	35%	73	71
Rancho Bernardo Road to Black Mountain Road	26,900	35%	72	71
Black Mountain Road to Camino San Bernardo	41,700	13%	74	74
Camino San Bernardo To Bernardo Center Drive	54,900	9%	76	75
Bernardo Center Drive to I-15	53,300	7%	75	75
Rancho Bernardo Road:				
Camino Del Norte to Black Mountain Road	4,500	31%	62	60
Black Mountain Road to Camino San Bernardo	20,700	7%	68	68
Camino San Bernardo to West Bernardo Road	26,400	3%	69	69
West Bernardo Road to I-15	45,900	1%	72	72
Black Mountain Road:				
Camino Del Norte to Carmel Valley Road	23,300	4%	69	68
Carmel Valley Road to Carmel Mountain Road	22,900	1%	69	69
South of Carmel Mountain Road	19,900	1%	68	68
Camino Ruiz:				
Camino Del Norte to Resort Street	7,600	22%	64	63
Resort Street to San Dieguito Road	13,800	11%	66	66
San Dieguito Road to Carmel Valley Road	19,000	6%	68	68
Carmel Valley Road to SR56	36,700	3%	71	71

CNEL rounded to nearest decibel.
Calculated using hard-site (or 3 dBA loss per doubling of distance) attenuation.
Traffic volume, mix, and speed data provided by Kimley-Horn and Associates, Inc., 1995

roadways. Calculations show that a small portion of the proposed area at each school lies within the 60 dBA CNEL contour from Four Gee Road (Figure 4.6-6). Sound levels would not exceed the State of California Standards for schools (65 dBA CNEL) and would not result in a significant impact.

The location of the actual school buildings on the sites have not been determined at this time. If the school buildings will be located within the 60 dBA CNEL contour, a site specific acoustical study will be required by the County to ensure that the building design limits the interior noise environment to 50 dBA CNEL or below. Since typical California building construction would be expected to provide at least a 15 dBA sound attenuation, mitigation of interior noise levels to below the standard is considered to be feasible and would not result in a significant impact.

Commercial Noise Sources

A neighborhood commercial site is proposed to be constructed at the northeast corner of proposed East Loop Road and Camino Del Norte. The site is located across from the proposed congregate care facility on the McCrink Ranch Tentative Map. Potential land uses at the commercial site include grocery and drug stores, specialty retail shop, and dining facilities. Generally, noise from these uses are associated with the loading and unloading of merchandise/supplies from delivery vehicles and the movement of vehicles in parking areas. Other noise sources could include compressor pumps for refrigeration and air-conditioning. Sound levels produced by these sources vary greatly and depend on the type and intensity of activities that would occur. Therefore, it is not possible to determine the level of noise impact until specific vendors have been determined. However, any commercial land use will be required to comply with all County property line sound level limits (San Diego County Noise Ordinance Section 36.404). As part of a Major Use Permit for construction on this land use, a site-specific noise analysis will be necessary for each commercial land use, as they are proposed, to ensure compliance with the County noise ordinance. Failure to design and operate commercial land uses in compliance with the noise ordinance will result in a significant impact to the proposed residences and the congregate care facility on the McCrink Ranch subdivision.

MAJOR NOISE CONTRIBUTING ROADWAY SEGMENT

MAJOR NOISE CONTRIBUTING ROADWAY SEGMENT

NOISE CONTOURS

PROPOSED MIDDLE SCHOOL SITE

PROPOSED ELEMENTARY SCHOOL SITE

PROPOSED COMMERCIAL SITE

UNIT 1

UNIT 1

UNIT 2

UNIT 4

UNIT 6

60

60

60

60

CAMINO DEL NORTE

CAMINO DEL NORTE

FOUR GEE ROAD

SEC. 30 T. 13 S. R. 2W.

SE 1/4 SEC. 24 T 13S. R. 3W.

0 350 FEET

NOTE: ALL CONTOURS GIVEN IN A-WEIGHTED DECIBELS.

Community Noise Equivalence Level Contours:
Bernardo Lakes Subdivision

FIGURE 4.6-6

Industrial Noise Source (Sewage Treatment Plant)

Industrial noise sources are limited to a sewage treatment plant proposed along East Loop Road along the eastern edge of the McCrink Ranch Tentative Map area. The site is separated from proposed residential areas in the McCrink Ranch Tentative Map area by East Loop Road, and a medium density residential area by an approximate 150-foot open space buffer. The facility would perform initial treatment of the sewage and then convey the effluent to an interceptor sewer for eventual final treatment and ocean discharge at the Point Loma Wastewater Treatment Plant.

Construction of sewage treatment plant facilities are typically partially above and below ground. It is assumed that the entire facility (including motor and pump assemblies) would be enclosed in order to comply with all County property line sound level limits. Noise impacts from the treatment plant are not possible to determine until a specific design has been developed. As part of the plant design, a site-specific acoustical analysis will be necessary to determine proper material selection and construction methods to ensure noise level compliance. Failure to design and operate the commercial plant in accordance with methods providing compliance with the noise ordinance will result in significant impacts to residential areas in the McCrink Ranch Tentative Map area as well as the medium density residential area to the south.

4.6.3 Specific Plan Area Level of Significance

No significant project-related noise impacts are expected to California gnatcatcher habitat.

No significant noise impacts are expected at the proposed elementary school or middle school sites. A site-specific interior acoustical analysis will be required by the County if school buildings are proposed within the 60 dBA CNEL noise contour of Four Gee Road. The analysis will be required to ensure that the proposed design will limit interior noise to less than 50 dBA CNEL.

Commercial uses located on the neighborhood commercial site may significantly impact proposed nearby residences and the congregate care facility on the McCrink Ranch subdivision. A site-specific noise analyses will be necessary, as part of the Major Use Permit for each commercial land use as they are proposed, to ensure compliance with the

County noise ordinance. If the businesses are designed and operated in compliance with the County noise ordinance. noise impacts will be fully mitigated.

The proposed sewage treatment plant site may impact residential areas located within the McCrink Ranch Tentative Map area as well as the medium density residential area to the south of the site. A site-specific noise analysis will be necessary to ensure compliance with the County noise ordinance. If the plant is designed and operated in compliance with the County noise ordinance. noise impacts will be fully mitigated.

An increase in noise levels at offsite sensitive receptors is expected due to increased traffic resulting from regional growth. Project-related traffic would contribute to noise increases at these receptors, but is not considered to be significant.

4.6.4 Specific Plan Area Mitigation Measures

No significant project related noise impacts are expected to California gnatcatcher habitat. therefore no mitigation is required.

No significant noise impacts are expected at the elementary or middle school sites. A site-specific exterior analysis will be required when grading plans for the school sites have been completed. The school buildings must be designed to ensure that interior noise levels do not exceed 50 dBA CNEL. If school buildings are proposed within the 60 dBA CNEL noise contour. an interior acoustical analysis will be required to verify compliance with the interior noise requirement.

As part of Major Use Permit approval for the neighborhood commercial site, a site-specific noise analyses will be required for each commercial land use as they are proposed to ensure compliance with the County noise ordinance.

In addition. a site-specific noise analysis will be required for the proposed sewage treatment plant in order to ensure compliance with the County noise ordinance.

No significant offsite noise impacts are expected therefore. no mitigation is required.

4.6.5 Tentative Map Area Impacts

Balcor Subdivision Tentative Map Impacts

Land uses proposed on the Balcor subdivision include residential areas, a clubhouse, a resort, and an 18-hole golf course. The ADT on roadways near the proposed residences and resort are projected to be less than 2,500 vehicles based on the Santa Fe Valley traffic analysis, (Kimley-Horn 1995) and would not generate a 60 dBA CNEL contour outside the confines of the traffic right-of-way. Therefore, no noise impacts would be expected at the proposed residences or the resort.

The proposed golf course will be located south of Del Dios Highway. Calculations show that approximately half of the northern portion of the golf course will be exposed to sound levels between 60 and 70 dBA CNEL (Figure 4.6-3). The proposed clubhouse would be located within the 65 to 70 dBA CNEL contour from the Del Dios Highway. Sound levels on the golf course site are expected to be below the state standards for such uses and will not result in a significant impact.

Seaton Subdivision Tentative Map Impacts

Land use proposed on the Seaton subdivision is limited to residential. The ADT on roadways which traverse the site is projected to be less than 2,500 vehicles and would not generate a 60 dBA CNEL contour outside the confines of the traffic right-of-way. No noise impacts would occur on this subdivision.

McCrink Ranch Subdivision Tentative Map Impacts

Land uses proposed on the McCrink Ranch subdivision include residential areas, a congregate care facility, and a 9-hole golf course. The ADT along the proposed Camino Del Norte and the project road identified as East Loop Road segment are projected to be 5,500 and 8,800 vehicles, respectively. The average vehicle speed for these segments are 45 and 40 miles-per-hour, respectively. Noise contours for this subdivision are depicted in Figure 4.6-5. Due to the moderate traffic volumes, low vehicle speed, and elevational differences between these roadways and the proposed residential pads, projected noise levels from these roadway segments are low. This is evidenced by the proximity of the 60 dBA CNEL contours to the source roadways. Thus, noise levels from these roadways

would not result in a significant impact. Sound levels at the proposed golf course would be less than 65 dBA CNEL and would not represent a significant impact.

Potential noise impacts to the McCrink Ranch subdivision from the neighborhood commercial site are discussed under Section 4.6.2.

Bernardo Lakes Subdivision Tentative Map Impacts

Land uses proposed on the Bernardo Lakes subdivision are residential and a neighborhood park. The ADT along the proposed Camino Del Norte and Four Gee Road are projected to be 9,200 and 3,700 vehicles, respectively. The average vehicle speeds for these segments are 45 and 40 miles-per-hour, respectively. Noise contours for this subdivision are depicted in Figure 4.6-6. Due to similar traffic and topographic considerations for the McCrink Ranch subdivision, as well as the addition of an approximate 150- to 200-foot-wide proposed open space zone between Camino Del Norte and the Santa Fe Valley SPA (in the City of San Diego), projected noise from the roadway segments are low. Thus, noise levels from these roadways would not result in a significant impact.

4.6.6 Tentative Map Area Level of Significance

Balcor Subdivision Tentative Map

There are no significant noise impacts to the proposed residences or the resort on the Balcor Subdivision Tentative Map. Sound levels on the golf course areas adjacent to Del Dios Highway are expect to be as high as 70 dBA CNEL, but are not considered to be significant.

Seaton Subdivision Tentative Map

There are no significant noise impacts to the proposed residences on the Seaton Subdivision Tentative Map.

McCrink Ranch Subdivision Tentative Map

There are no significant noise impacts to the proposed residences on the McCrink Ranch Subdivision Tentative Map.

Bernardo Lakes Subdivision Tentative Map

There are no significant noise impacts to the proposed residences on the Bernardo Lakes Subdivision Tentative Map.

4.6.7 Mitigation Measures

Balcor Subdivision Tentative Map

No impacts were identified for the Balcor Subdivision Tentative Map, therefore, no mitigation is required.

Seaton Subdivision Tentative Map

No impacts were identified for the Seaton Subdivision Tentative Map, therefore, no mitigation is required.

McCrink Ranch Subdivision Tentative Map

No impacts were identified for the McCrink Ranch Subdivision Tentative Map, therefore, no mitigation is required.

Bernardo Lakes Subdivision Tentative Map

No impacts were identified for the Bernardo Lakes Subdivision Tentative Map, therefore, no mitigation is required.

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